

**LONDON, SATURDAY, APRIL 16, 1864.**

(WITH SUPPLEMENT) { STAMPED.....SIXPENCE.  
UNSTAMPED..FIVEPENCE.

**S** Captain of the Burra Burra Mines) is PREPARED to EXAMINE and REPORT upon any MINES or MINERAL DISCOVERIES in the ABOVE-NAMED COLONY. —Address, Capt. BRYANT, Koorlinga, South Australia.



## Original Correspondence.

## THE NEW GEOLOGICAL SPECULATIONS, AND THE MANCHESTER GEOLOGICAL SOCIETY.

SIR,—As silence on my part might be supposed to be assent to the assertions cast by some of your correspondents upon the views which I have promulgated in my paper upon Modern and Scriptural Geology, will you allow me a few closing words, to say that neither the facts which I have advanced, nor the anomalies which I have shown of many of the current geological theories, have been in any way damaged or even encountered; and that the letter of Mr. John Atkinson (of Thelwall), although written by him "as one of the honorary secretaries of the Manchester Geological Society," and addressed from the society's rooms, at the "Museum, Peter-street, Manchester," and which might, therefore, be taken as an official communication, was written upon his own responsibility, and not authorised by the society. I was prepared at the outset for a fair amount of opposition, but the personalities and sneers, and the attempt there has been to smother and hoot down the expression of my fair opinions, have far surpassed what I had anticipated, and, in some respects, there has been actual rudeness, as though an evil spirit had taken possession. Mr. Binney and Mr. Atkinson have apparently left nothing undone to prevent the paper being in any way recognised. Even the reporters who attend the meetings were, I am well informed, requested (Mr. Atkinson being foremost) to omit the usual notice with which they favour the society in the newspapers, being an interference with their impartiality and independence which during the years that I was the acting honorary secretary and president was never attempted, and which, I am happy to find, was on this occasion not acceded to by the reporter for one independent newspaper, whose report was taken at the meeting, and which has formed the basis upon which the discussion has been founded. My paper, as published, is substantially the same as that read at the meeting, there being only such verbal alterations and a transposition, as will often occur and be found requisite when manuscript has to be prepared at intervals, as space and time can be found. My thanks are due to Mr. H. Rhys for the support he has brought to bear in regard to the larger area which the Silurian rocks have covered when flat to that which they now occupy; and also to Mr. Ennor for the timely repetition of the views he has so long advocated. I could myself have extended my own views to greater length in some minute but important points, such as the bending and alteration in the direction of the cleavage at some of the faults in the strata; but especially in showing that the current views as to the formation of rocks and the contour given by supposed denudation, cannot be correct without believing that the formation of all the principal faults did not commence until the whole of each division or group of conformable strata was deposited, and that the formation of faults has ceased since the supposed denudation took place. This, in itself, is sufficient to stagger belief in the current theories; but, as with several of the other points, it is conveniently ignored.

The commotion which my paper has excited amongst what may be called superficial or fashionable geologists, shows how uncertain must be the data upon which they have put away the current conclusions as settled. I well remember on one occasion, about ten years ago, showing to Mr. Binney a piece of impure ironstone, which I had taken from the lower series of the Lancashire coal field, and asking him where it belonged. He said, "From not above the 40-yard mine," which is in the lower series. I said, testingly, to him, "What do you say to its being from above the black and white coal?" which is in the middle series. He replied, pointing to the well-known Goniatite, Aviculapecten, &c., fossils, which so markedly characterise that part of the lower series, "If that be so, then the experience of a lifetime is thrown away." This made a great impression upon me at the time, and I have myself since helped to give currency to the diagnostic value of these fossils. But both Mr. Binney and myself have now lived to find these fossils are not confined to below the 40-yard mine, and that now they are, upon the authority of the officers of the Geological Survey, acknowledged to extend not only to as high a point as my question indicated, but higher still, almost at the top of the middle series, nearly 1500 yards higher up in the strata than Mr. Binney then indicated as the limit. His lifetime experience, great as it was, has, therefore, on this point been thrown away, and many of the current geological theories are based upon no better foundation. I have calmly and temperately pointed out the principal current theories which, upon long experience, I find to be irreconcilable with observed facts, and I have shown how the observed facts are reconcilable with the oldest and highest authority of all; and I now leave the subject to germinate, feeling sure that the present current theories do not deserve to be recognised if they will not stand the test of a critical examination.

Pendleton, Manchester, April 14.

JOSEPH DICKINSON.

## PATENT OFFICE AND LIBRARY.

SIR,—Whatever may be thought of an Inventors' Association for procuring a site and buildings for a Patent Office and Library, every one at all interested in the matter must so far sympathise with the object of the Association as to desire to quicken the movements of the Commissioners of the Treasury, and also to wish to procure suitable accommodation on a site as near as can be to Lincoln's Inn. Ever since Oct. 1, 1852, it has been "Lawful for the Commissioners of Her Majesty's Treasury to provide and appoint from time to time proper places or buildings for an office or offices for the purposes of this Act," the Patent Law Amendment Act, 1852. In 1853 the present offices were procured on payment of rent to the Sutors' Fund of the Court of Chancery, but "This arrangement was not considered to be permanent," neither is the accommodation at all adequate to the purposes of the Patent Commissioners. In July, 1862, a memorial was presented to the Commissioners of Patents urging the provision of suitable offices, library, and reading rooms as a matter calling for immediate attention. And the prayer of this memorial was acceded to by the Commissioners of Patents in their report, dated Aug. 7, 1862. But the misfortune was that this report was incumbered with a recommendation that the Patent Office, Library, and Museum should all be in the same place, or at least contiguous. And this created a difficulty as to the necessary site for the building or buildings, and nullified the whole proceedings. Now, the important point to urge upon the Commissioners of Her Majesty's Treasury is that there is no necessity whatever to have the Patent Museum contiguous to the Patent Office and Library. The two Institutions are quite distinct in their practical uses. Even if it were possible to accomplish by means of the Museum the educational results for the benefit of skilled workmen, which form the ground of the recommendation, this would be no reason for placing the Museum in close contiguity with the Patent Office and Library. But my conviction is that what is set forth in the report as a probable result of the working of the Museum would never be realised, and that the outlay occasioned by the attempt to make it so would be enormous. Let persons interested in patents, then, keep the two Institutions distinct in their own minds, and confine their efforts to the procuring of a suitable Patent Office and Library from the Commissioners of the Treasury as near as they can to Lincoln's Inn, and with as little delay as possible.

WILLIAM SPENCE, Assoc. Inst. C.E.  
50, Chancery-lane, W.C., April 11.

## THE CROWAN DISTRICT—No. 1.

SIR,—It frequently occurs in mining that when an adventure, which has for years been working itself up to prosperity, becomes suddenly prominent, the mining world is astonished that they did not earlier perceive its value, are immediately possessed by an intense desire to procure shares in adjacent sets, which spring up with proportionate rapidity, and forthwith a fashionable district is inaugurated. Now, this is not to be altogether reprobated, as in a highly mineralised county like Cornwall some good mines seem certain to result, and discoveries greatly advantageous to the neighbourhood necessarily occur. One great evil, however, naturally accruing from the investment of so much capital in one district, is the entire neglect which valuable and highly-mineralised parishes receive, and which, it should be known, present far greater economic facilities. During my late labours amongst the Crowan and Gwinear Mines this most forcibly impressed me. Although generally acquainted with the mines in the district, I had never carefully studied its geological features, and, consequently, was not sufficiently aware of its wonderful capabilities for yielding ores of metals. Since completing my geological survey, and more especially seeing the principal features clearly delineated before me in the map and sections prepared, I remain firmly convinced that these districts are but superficially mined, and that here there will be at some future period a mining focus second only to that of the Camborne and Illogan. A very superficial glance at the maps prepared will show that in no portion of the

county have more shafts been sunk, or the lodes more opened on at shallow depths; indeed, nearly the whole of the lodes have made profits at shallow depths, while those that have been effectually proved in depth have been still more productive.

This is well exemplified in the fact that Great Wheal Abraham, the only really deep mine in the district, returned 2,000,000. The linear courses of the lodes continue for greater distances, and are more clearly defined than in any district with which I am acquainted; while the backs produce ores of metals, in many instances, to grass.

I write this in haste, but shall return to the subject, and shall give a short geological description, with some remarks on prominent mines, and shall also indicate those which I think deserve to be reworked. I leave tonight to visit some mines in this district, and shall from them send you a few more lines on the Crowan district. It affords me much satisfaction to see the energetic progress of the Wheal Abraham Mines, as I have no doubt that the starting of several of the surrounding and prematurely abandoned mines will be the sequence of the opening up of these large and valuable mines.

The Crowan district immediately adjoins that of the Wheal Vor, and I do not think it is generally known that the Wheal Vor cross-course intersects Crowan, subsequently passing through Wheal Tremayne and the Alfreds in its course to the north coast.

BRENTON SYMONS.  
18, Hatton-garden, E.C.

## CORNISH PREJUDICES—DEVON COPPER MINE.

SIR,—Your Truro Correspondent, in his "Report from Cornwall and Devon," last week, ventures to make assertions with regard to lodes about Dartmoor which seem to be of rather a sweeping nature. He states that the finest looking lodes at surface in and around Dartmoor invariably lead to nothing. Now, Sir, there is a mine called Devon Copper Mine, in which many of your readers are deeply interested, some as adventurers and others as true miners, taking an interest in all that is going forward, especially in the development of districts almost untried. This mine is situated on Dartmoor, about three miles from Okehampton, and is opening in splendid style; in fact, now that the water-wheel and other machinery are fairly started, and the operations can proceed unchecked, it is the opinion of most experienced persons that discoveries of a very important nature will probably be met with at no great distance from the present workings. The lode at present in course of development being from 18 to 24 ft. in width, most kindly throughout, and already producing good stones of ore, with plenty of mundle and everything else that a miner likes to see, it is evident that should it run into regular deposits of ore an extraordinary mine will be at once opened. When reading the remarks of your Truro Correspondent we must not forget that strong prejudice has ever existed with regard to the production of ore eastward of certain limits. These limits were originally laid down in Cornwall, but the steady progress of mining discoveries to the eastward, including Devon Consols itself, has proved the utter fallacy of such a theory, and, unless our greatest miners are much deceived, the development of Devon Copper Mine will compel an advance still further to the east. The fact is, very few attempts have been yet made to test the mineral treasures around Dartmoor. Does your correspondent mean to include in his too hasty statement the Old Wheal Friendship, which is situated close to Dartmoor, is over 200 fms. deep, has been worked near a century, has paid hundreds of thousands in dividends, and is still looking well?—April 13.

EAST WARD HO!

## EAST WHEAL VOR MINE.

SIR,—All who have a love for mining, either as a science or a speculation, will be truly glad to find that this mine is now being vigorously worked, and must cordially wish the parties who have gone into it so energetically all the success they can desire. The prospectus has been criticised as too glowing; now, I know the district and the mine well, and I think, if anything, the prospectus is less favourable and less glowing than the truth simply justifies, for I am sure it only requires patience and perseverance for this mine to rival its rich neighbour, Great Wheal Vor. The features of the adventure are most remarkable—nay, unexampled—there being no less than five important points, besides minor ones, to come off, three of which will come off in a few months—viz., driving the 60 ft. level east, on Bramble lode, under the shoot of tin gone down in the bottom of the 50 east, and worth 40 lb. per fm. for 30 fms. long; driving the 60 west, under another shoot of profitable tin gone down in the bottom of the 50 west for 20 fms. long—both which shoots in the 50 ft. level produced 10,371 lb. worth of tin; and the cutting of Smith's lode at the 60 ft. level. This lode, although a fine masterly lode, and equally as promising as the Bramble lode, has not been seen below the 30. When any of these points become, as they certainly will, profitably productive, shares will go to 100, each, or upwards, immediately. A fourth point, of great importance, is the junction of Bramble and Smith's lodes, as well as several branches intersected in a cross-cut at the 30 ft. level, which, from the underlie of the lodes and branches, may be expected to take place about the 100 ft. level; such a junction in this district infallibly occasions a large deposit of tin. A fifth point, and the greatest prize of all in the idea of some parties, is the exploration of the Great Wheal Metal lode, which hitherto has been most inexplicably allowed to remain unworked, except at surface.

I think I have enumerated sufficient to prove that, with a capital of 6000 lb. in hand, and all the necessary plant on the mine, and in a condition equal to trying and proving the points I have named, the shares are cheaper at 5 lb. per share, or 30,000 lb. for the mine, than any other young mine in the market. There are cavaliers who say the price is too high; let them keep their money and advice—I want neither to encourage me in my resolve to hold on the shares I have taken in it, as I have no doubt I shall in a few months be richly rewarded by finding the shares doubled in market value, despite the ominous predictions of the market oracles to the contrary. Look at East Lovell shares; they were 6 1/4 a month or two ago—today they are 13 lb. Did not the "market oracles" and "private advisers" vow they were not worth sixpence a dozen? Where are they now? Mark my words—the "oracles" will also decide those who act on their "advice" in East Wheal Vor, for they also will be 13 lb. before Christmas next.

April 13.  
P.S.—I am happy to say Great Wheal Vor never looked better than at present, so the declining state of the market can only be attributed to market operations, as the shares are cheap at 50 lb. each, should their present prospects continue.

## GOLD IN WALES.

SIR,—In the Journal of March 26, I perceive that I have had the misfortune to draw upon myself the censure of an "Englishman in Wales;" and what for, I pray?—why, for writing a report upon the Sovereign Gold Mine, a report I believe now, and did believe when I wrote it, correct and true in every particular. I hope an "Englishman in Wales" will not be offended if I tell him that my opinion is he has more than one man's ordinary share of confidence in presuming to elevate himself by criticising what he does not understand. He says he "would not, on any account, undertake to work 300 stamps with their water, if he were restricted to a fall of 240 feet." There is no occasion to be restricted to that fall—he could have three times that fall if he liked; but I should like to know more of him yet before I should consider him a judge of what could be done at all. Because he would not undertake to do a certain thing, I am by no means prepared to admit that no one else could do it. I should have answered his letter last week, but was prevented by indisposition; but I will now take leave of an "Englishman in Wales," by informing him that, however worthless my report may appear, it is, at all events, worth the paper it is written on, and that I ever succeeded in getting for it.—St. David's Gold Mine.

## GOLD IN WALES.

SIR,—In the Journal of April 2, I perceive that the opinions of a correspondent, signing himself a "Welshman in Wales" (which is, by-the-bye, a very appropriate name), coincides in nearly every particular with the views expressed in my letter of March 19. This is in itself very satisfactory, as it proves the correctness of the conclusions arrived at by me. He says that "I seem to imagine" Mr. Watson's remarks were quite called for. If he did not thoroughly comprehend my meaning, I will at once set his mind at rest, by again assuring him that I do imagine they were called for. He then goes on to say that the whole tenor of my letter was to run down Mr. Nancarrow's report, by insinuating that it was written on too large a scale. There, again, he is right; and I should imagine that others could see that important fact, without his taking the trouble to point it out to them. His next is that he is a Welshman, and he very pointedly says that he is in Wales. Why not have said at once what he meant, which is simply this—that he is at home, and he wishes that everyone else were. That being what he means, I most heartily second his wish. He then says that there are too many Englishmen like me in Wales. I can easily believe that; people do not like to hear the truth, if that truth be unpleasant. As to jumping into print, I promise him that another such flagellation as I have received at his hands will make me jump out again, never to return. The next is one of the points on which I disagree with him. He says that I am "attempting to snub or crush anyone who is likely to do in Wales in gold mining what Englishmen have and are doing elsewhere, in various parts of the world." This is certainly incorrect. I have simply stated facts, and facts, too, which I can uphold against all England and Wales put together. Another reason why it is not at all likely I should attempt to do that is, because the success of gold mining in Wales is to my interest, and I should profit by it, as many hundreds of others would do. His remark that the "coming man is come at last" is, I suppose, in reference to the long time he has taken in coming; of course, with that I have nothing to do. The next sentence or two in his letter has reference to the lodes in the sett with which I am acquainted, and I perfectly concur in everything he has said about them; but I do not concur in his opinion that they justify Mr. Nancarrow's report, my reasons for which I shall presently explain. He now asks the question—"What is there in that report so alarming?" This question he answers himself, and expresses my very opinions in his answers, which run as follows:—"1. The present works are designed to deal with 50 tons in 24 hours." This, I admit, is not only alarming, but astounding. When one considers that there are only eight heads of stamps to treat that quantity, the conclusions arrived at are perfectly justifiable, and I am very happy to say that a "Welshman in Wales" considers this statement as one of the alarming ones.—2. "That these works will give profits." If they depend upon 8 heads crushing 50 tons per day before they get profits, why, of course, this is another very alarming statement.—3. "At Gwelford you have a fine water-power." This I disposed of before very satisfactorily. I admitted they had; but I said they could not make use of it for the present works, which is an indisputable fact, as is sufficiently proved by their now using steam instead of water power.—4. "The views are capable of supply 150 tons of auriferous ore daily, which quantity can be increased to any extent." This is certainly an alarming statement, and I am very pleased to see that a "Welshman in Wales" holds just the same view of the case as myself. Of course, when the veins are opened sufficiently, and their underground operations are placed upon a scale extensive enough, why then they may obtain 150 tons per day. I could name many mines with which I am acquainted that are raising more material than that, and stamping it, too. At Dolcoth they raise and stamp upwards of 200 tons per day; but we must recollect that this mine is upwards of 200 fms. in depth, and to open out a mine to that extent is not the work of weeks or months—it is the work of years.

The next part of his letter has pleased me very much, for, after agreeing with me in almost every particular thus far, he gets into a bad temper, and says I do not know

what I am writing about; but, as I am of a very forgiving disposition, I will not be offended, but will explain what it appears I did not make sufficiently plain in my former letter. I, of course, did not refer to the Hungarian pans being discarded, and I am astonished that a "Welshman" should have failed to perceive what I did refer to. If he is still in ignorance, he can easily satisfy himself by going to the Welsh Gold Mining Company's Works, and seeing what machinery is there besides the Hungarian pans; and then going to the Vigna and Clogau, and seeing similar machinery, that is, as I said, discarded and lying on the ground in a heap. Having explained that, I am not the Hungarian pans to which I alluded, the "unqualified manner" in which I was to be contradicted will now be quite an unnecessary exertion on his part. A "Welshman" next wishes to know if there is "something out of the way in having 354 men at work?" I answer, No; quite the contrary. In the ground that is opened there they would be very much in the way of each other. In conclusion, I have only to say that I most heartily second the wish of a "Welshman," of seeing 384 men, or four times that number even, at work on a gold mine in Wales; but we must have patience. We shall not see that just yet; a mine cannot be opened like a house, by just throwing back the doors. The old adage, "We must crawl before we can run," is true in mining as in everything else. I also coincide with his last, and can say with truth that the success of this mine and also of many others is earnestly desired by every—

ENGLISHMAN IN WALES.

## GOLD IN WALES.

SIR,—In my last letter there is an inaccuracy, the meaning of which is, however, easily understood by those conversant with mining. I refer to the first line in the estimated cost of producing gold quartz: it should be 275 fathoms, and not tons; the totals and results, however, stand the same. I have heard it stated that 4 lb. per fathom is rather too low a price for the generality of quartz veins, and from all places. Bearing in mind the foundation of those estimates—a capital of 100,000 lb., a fall and fair proportion of which, it is assumed, has been laid out in establishing the works, in sinking shafts, in driving levels, in erecting very improved machinery for the delivery of large quantities of stuff, and a co-extensive establishment for the reduction and amalgamation of the same, I do not think the estimates are out of the way. The yield of gold is assumed to be of the lowest order, and the selling price of 70s. per oz. Both these items leave a good margin for any extras arising. Your readers will be glad to know what is being done in the way of reducing the quartz. In the Vigna and Clogau, the at present, queen of Welsh gold mines, the mode was by means of crushing and stamping, and also Berdan's pans; the latter have been laid aside. "The Little Britons" have held their way, and are still in use there. Mosheim's pans were not continued, at least on the large scale once contemplated. The Schemnitz system of Hungarian pans has been in use. These pans are an inexpensive article, and very simple; they have been so recently introduced that not much is said about them just at present.

The Clogau Mines have a first-rate staff of officers. None of your "square pegs in round holes." CAMBRIAN has been rather quiet lately. In the PRINCE OF WALES Mines Captain S. Jones has been busily engaged for some time in erecting works and machinery for barrel amalgamating. We shall see these going very soon. I hope Capt. Jones will succeed in placing a Prince of Wales' plume in his cap. In CERNCON there is a very extensive field of machinery. "The Little Britons" do good service there, and Hungarian pans seem to be the order of the day. From the latter mine, through the CERNCONIANS and DOLFWYNOG, the sound of the hammer is heard. Up at Gwelford, as your last Journal informed your readers, most important discoveries of gold have been made. This place must have been a great source of supply of gold for the alluvial below on both banks of the Mawddach. There certainly is something bigger than a speck to be found occasionally. I have seen nuggets worked out of the alluvial of the several weights of 8 grains, 13 grains, 18 grains, 27 grains, and in one instance 38 grains. They were somewhat water-worn. On again, further ahead, gold has been discovered adjoining CASTELL CARL DOUGLAS, and in the latter gold is seen as plainly as copper in a lode. All these mines are on what I would term the golden rule of new gold. The men of Merioneth themselves have at last opened their eyes to the riches surrounding them, and are now extensive holders of shares in several gold mines. Through good report and evil report, the determination now is to work the veins legitimately, trusting to their intrinsic value for ultimate results.

There is now greater anxiety to obtain sets than to get rid of them, and, after obtaining them, the keenest search is made for a golden quartz vein. These searches have lately been crowned with success, and there is the greatest faith that there are more than one Clogau to be found. We are not jealous of anyone who deals fairly. I am one of those who wish success to every Englishman, as my letters testify, and as every—

WELSHMAN IN WALES.

## WHEAL GRENVILLE.

SIR,—Messrs. Charles Thomas and Son inspected this mine on Wednesday last, and as various rumours are being circulated as to the nature of their opinion, allow me a brief space to state that the report is of the most favourable character. Messrs. Charles Thomas and Son value the different points of operation upon the tin lode at 200 lb. per fathom in the aggregate; the value of tin ground laid open above the 100 fathom level they estimate at 17,000 lb. (the ground in the 100 cannot, of course, be valued until the 110 is driven under it); and they state that as soon as the 32 heads of stamps are at work, 20 tons of tin may be fairly returned, at a profit of 500 lb. or 600 lb. per month, and should the lode be as productive in the 110 and 120 fathom levels, the profits will be greater. As the report only reached me this morning, and is of a lengthy character, I have not time to send a copy for your columns, but a printed copy will be sent to every shareholder in the mine as soon as possible.—13, George-yard, Lombard-street, April 15. JOHN WATSON.

## MINING IN AUSTRALIA—THE ADELAIDE MINE.

SIR,—In the Journal of Nov. 21 last there is a report upon the mine of this colony, in which the writer, after giving a glowing description of the "Adelaide" Mine, states that this property was offered to me for the Great Northern Mining Company for 1000 lb., but refused. As the shareholders of the company for whom I am acting may be led to suppose, from the manner in which this report is worded, that I have neglected to avail myself of an opportunity of acquiring a valuable property for them, I trust that you will allow me space in your columns to correct any such impression, by stating that I have no authority to expend the funds of the company in the purchase of mineral property; and, therefore, whether the Adelaide Mine deserves the encomiums which have been lavished upon it or not, I have never been in my power to obtain it for the company. CHARLES BOSWELL.  
South Australia, Feb. 25.

## MINING IN IRELAND—No. XIV.

[FROM OUR CORRESPONDENT IN THE COUNTY OF CORK.]

I do not know how it is, but there seems to be a strange fatality attending many of the mines, or the parties connected with them, in this country. Sound and bona fide speculations are taken up and began with vigour, but just as the mines are placed in a proper position for prominent and, in many instances, profitable working, there is a hitch in some quarter, and the operations in the mines have to be temporarily suspended. One question leads to another, and what at first was intended only as a temporary suspension proves too often to be a dead stop, and, consequently, loss of capital. The Carravilla Mine, after remaining idle, through Chancery suits and almost endless litigation towards of 40 years, when the property was sold in the Encumbered Estates Court, was re-opened about three years since; powerful machinery of all kinds have been erected; the mine forked, and cleared out; new and valuable ore ground laid open, with every prospect of permanent success in the engine and skip-shafts and bottom levels, and regular sales of ore begun, when, unfortunately, one of the proprietors became involved, and had to seek relief in the Bankruptcy Court. Although this untoward affair does not affect the real value of the mine, yet the fact of suspending operations, or, nearly, just as the mine was got into a regular course of working, and on the eve of making profits, must, no doubt, be a source of annoyance and disappointment to the other proprietors. It is to be hoped, however, for the sake of the parties concerned, and also for the character of the district in general, that matters will soon be arranged, and that we shall again see some hundreds of men at work in Cappagh, and that the best reports of the mine will be regularly seen in the Swansea Ticketing Papers. BALLYCUMMINS MINE is passing into the second hundred fathoms below surface, and it is reported that a parallel new lode of a promising character has been intersected by a cross-cut in a deep level. At SCHULL BAY MINE the engine is at work, but nothing else doing. Several attempts it appears have been made to raise the capital named in the prospectus, but without success. It has also been proposed to wind-up the company voluntarily, but, whether owing to apathy or indifference on the part of the shareholders, the directors do not appear to have come to any decision in the matter. The mine is well laid out, and supplied with machinery for extensive operations; and having already produced copper ore of the value of 20,000 lb., it seems strange that it should remain idle for want of a comparatively small amount of capital. MOUNT GABRIEL MINE is still creeping on with half-a-dozen men; it is surprising that the proprietors do not work this mine. Several large ore lodes have been opened, and a score miners would soon break a good lot of ore. An adit level cross-cut would, it seems, lay open and drain the mine to a considerable depth; it has been favourably reported upon by Capt. Henry James, of Wicklow; Mr. John Hitchens; Capt. W. Thomas, of Schull Bay; Capt. W. Roberts, of Wicklow; Capt. Eddy, of Cappagh; and Capt. H. Thomas, of Boaring Water. DUNMUR MINE, I see by the Swansea Ticketing of April 6, has sold 17 tons of ore, or, nearly, the amount of 62 lb. 1s. During a rather angry and personal correspondence which took place last year in the Journal between Mr. Tonkin, the agent of Duhur, and "An Old Miner," Ballydehob, Mr. Tonkin stated in his letter to the Journal of Oct. 26, 1863—"If the 'Old Miner' comes this way, I could show him some hundreds of pounds worth of ore dressed, and more in course of preparation, with a lode of rich purple ore in sight at 40 fms. depth, to work away on." If Mr. Tonkin had hundreds of pounds worth of ore dressed six months ago, and a lode of rich purple ore in sight, it would appear that he viewed both the one and the other through a powerful lens, or else he must, ever since, have been studying the rule of reduction, the hundreds of pounds worth of ore dressed six months ago, and that in course of preparation, having dwindled down to 62 lb. It might have been, however, that a vessel of proper size could not be got to take the whole of the ore, or, it is possible, that there might have been an slight error in judgment on the part of Mr. Tonkin when he thought he had hundreds of pounds worth of ore at Duhur. People when they write in the Journal should be careful to state the truth.

## [ADVERTISEMENT.]

THE NORTH WHEAL SETON COPPER MINES (LIMITED).  
Capital, 25,000 lb., in 1000 shares of 25 lb. each. Deposit, 2 lb. 10s. per share. The attention of investors is called to the prospectus and reports, which have already appeared in print, the latter from men eminent in the mining world for their scientific knowledge and sound judgment; and as the mines have been secured on unusually advantageous terms, and as the directors is composed of practical men, it may confidently be predicted that this will prove one of the most productive investments of the day.  
Applications for shares and prospectuses to be made to Messrs. C. and C. Thomas, Victoria Chambers, Leeds.

COMPETITION DISTANCED BY MILES.—We understand that the 160 trousers supplied by Mr. Alfred Webb Miles, of 73, Brook-street, Hanover-square (from whom they were originated) are far superior to those obtained of any of the numerous imitators, and that his customers ensure better value for their money in the various departments of his trade as a tailor than they are likely to get elsewhere. It may be well to note the address (73, Brook-street, his only place of business), as he formerly resided in Bond-street.—Observer.



The SECRETARY said, as far as these properties were concerned, they presented most remarkable facilities for being brought into a consolidated property. He had not the slightest doubt but that the most satisfactory arrangement could be made, and one that would be beneficial to all parties.

A vote of thanks to the Chairman was then passed, which concluded the proceedings.

**GREAT WHEEL GRYLLS MINING COMPANY.**  
A general meeting of shareholders was held at the offices, Broad-street-buildings, on Tuesday,—Mr. PETER WATSON in the chair.  
Mr. DUNSFORD (the secretary) read the notice convening the meeting, and the minutes of the last were read and confirmed. The accounts showed—

Balance last meeting .....	£3102	5	0
Tinstuff sold .....	51	7	5 = £3163
Mine cost .....			355 6 7
Leaving credit balance .....	£1768	6	10

Leaving credit balance ..... £1768 6 10

The report of the agents was read, as follows:—

April 9.—We beg to hand you our report of the prospects and progress made during

The last three months Mitchell's Lode: The adit level has been driven west 27 fms. 3 ft. 6 in., through a lode for all this distance worth \$1. per fathom; the back of which will be taken away on tribute, at about 9s. in 1*l*.; the end at the present time is worth 2*l*. per fm. Mitchell's shaft is sunk 8 fms., and is down 33 fms. from surface; we expect to communicate this shaft to the adit level in a month from this time, which will result in some considerable saving.

Kendall's Lode: This lode was driven east 27 fms. from surface; the adit level is extended west 5 fms. 4 ft. 6 in.; the lode is 5 ft. wide, worth 5*s*. per fm., and would work at 8s. in 1*l*. if we had a stamps on the mine. The 27 fm. level from surface is driven 28 fms. 1 ft.; the lode for this drive is worth 2*l*. 10s. per fathom, a certain part of which will be taken away at a profit; the lode in the end is 4 ft. wide, yielding a little tin. At this level cast we have driven 3 fms.; the lode has produced a little tin, but no considerable quantity. The lode is 6 ft. wide, worth 6*s*. in 1*l*.; the first 5 fms. was unproductive, when an improvement took place, and the rest of the drive 47 fm., price for driving 1*l*. 5s. per fm.—Kendall's Lode: The 27 has been driven west 7 fms. 0 ft. 6 in.; the lode for this driving and also in the present end is small, and of no value. The adit level has been cleared and repaired for a long distance and put in proper working order. At the engine-shaft the old fend-off bob is taken out and the brown party shaft is driven with new set of cells, stays, &c., fixed aright and the road is now perfectly completed. Some considerable repairs were made to the mill, and we have repaired the flues, oven, and burning-house, and put them in proper order for burning tin. The engineers have taken out the old nozzles, and put in new ones, and sent the spills and pillars to foundry to be lengthened; in a few days after we get those materials we shall be in readiness to work the engine. There is also a new horse-whim erected on Mitchell's shaft. From our underground operations we have raised 417 bushels of tin ore, which we consider is worth 75*l*.—EDWARD BOBBS, JAMES FORD,

Mr. E. C. Cooke enquired when it was expected the engine would go to work?—Capt. Roskams hoped it would be at work in about three weeks from the present time. They purposed forking the mine for 10 fathoms, and then driving on the bunch of tin down below the adit. In about six or seven months from the present time some satisfactory results would accrue. The accounts were passed and allowed, and the report was ordered to be entered on the minutes. A vote of thanks to the Chairman terminated the proceedings.

A general meeting of shareholders was held at Mr. Peter Watson's offices, Old Broad-street, on Wednesday,

A statement of accounts for the three months ending with the costs for January was submitted, from which the following is condensed:—

Mine cost.....	£732	9	4
Merchants' bills.....	408	3	9
Dues.....	8	10	9=£1149 3 10
Balance last audit.....	£702	14	2
Black tin sold.....	158	5	1= 860 19 3

Leaving debit balance .....	£288 4 7
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The CHAIRMAN said the whole of the shareholders had been fully apprised by the periodical reports which have appeared in the *Mining Journal* of the fact that the Georgia lode, which had become celebrated for its unusual productiveness, had declined in value, or, to use a miner's term, "fallen off." He need hardly say that it was the nature of lodes, irrespective of district, to alternate in value; and, therefore, the shareholders in Wheel Gyrila could not expect that their property should possess an immunity from vicissitudes, which was inseparable from mining enterprise; but, at the same time, they had the satisfaction of knowing—which was by no means unimportant—that lodes such as Georgia produced, when in a productive condition, not only a considerable quantity of mineral, but that it was of a quality far exceeding the average yield of other lodes. Moreover, when such lodes as this were valued at about 30*l.* or 40*l.* per fm. it was really as remunerative as other lodes of treble that value, inasmuch as it cost less to develop, owing to the easy nature of the ground. Another characteristic of such a lode was that, although it might be impoverished at any, yet before the dawn of to-morrow it might again be as good as new, or even more so. (Hear, hear.) But, as the Georgia lode had fallen off, yet each of the other lodes continued equally as productive as they had been for some considerable time past; in fact, rather than otherwise, they were improving in their character. He might mention that since the last meeting the committee had signed the leases for the additional extent of ground referred to at the last meeting, and operations therein had been commenced, and were being vigorously prosecuted for the agents were fully sensible of the fact that it was only by carrying on an ample systematised plan of exploratory or work operations that they could hope to make further discoveries, and thus to establish their mine as a permanently-productive property. (Hear, hear.) As regards their finances, it would be seen that the committee had charged the whole of the law costs, amounting to 453*l.*, in connection with the Florence, after deducting which there was left a balance of 305*l.*, to be carried forward to the credit of the next account. Hearing that, Mr. Rogers was present, and he asked the chairman any questions in connection with the matter, the Chairman concluded by moving that the accounts be allowed and passed, and that the report be entered on the minutes.

A Royal Belgian decree sanctions the importation with a temporary freedom from import duties of rough foreign pig intended for the fabrication of cast-steel, rough or worked, and intended for exportation. This favour is accorded subject to conditions and formalities to be prescribed by the Minister of Finance. By a ministerial Belgian decree also the arrangements of decrees dated July 21, 1858, and March 31, 1859, are rendered applicable to rough pig intended to be applied to the fabrication of cast-steel rough or worked, and intended for exportation. The decrees of 1858 and 1859 had reference to the temporary free importation of rough pig intended for the fabrication of engines and machinery, as well as works and cast-iron in cast-pig. Among other official acts referring to metallurgy may be mentioned some rejections of applications for concessions of mines, and, on the other hand, the obtention by the Prince and Princess of Capua of the Verbeumont Mines of manganese, lead, zinc, &c., containing 1748 acres, and situated in the provinces of Liège and Luxembourg. There is no great novelty to note in the situation of the Belgian market; affairs with England become more and more sustained; some great contracts are in course of execution with leading houses, and, on the whole, prices remain very firm, while a good deal of animation prevails at ironworks. On the Bourse of Brussels some lots of rolled iron, No. 1, have changed hands at 71. per ton; delivered at Brussels, No. 2, 77. 12s.; No. 3, 84. 4s.; No. 4, 85. 4s.; No. 5, 86. 4s.; No. 6, 87. 4s.; No. 7, 88. 4s.; No. 8, 89. 4s.; No. 9, 90. 4s.; No. 10, 91. 4s.; No. 11, 92. 4s.; No. 12, 93. 4s.; No. 13, 94. 4s.; No. 14, 95. 4s.; No. 15, 96. 4s.; No. 16, 97. 4s.; No. 17, 98. 4s.; No. 18, 99. 4s.; No. 19, 100. 4s.; No. 20, 101. 4s.; No. 21, 102. 4s.; No. 22, 103. 4s.; No. 23, 104. 4s.; No. 24, 105. 4s.; No. 25, 106. 4s.; No. 26, 107. 4s.; No. 27, 108. 4s.; No. 28, 109. 4s.; No. 29, 110. 4s.; No. 30, 111. 4s.; No. 31, 112. 4s.; No. 32, 113. 4s.; No. 33, 114. 4s.; No. 34, 115. 4s.; No. 35, 116. 4s.; No. 36, 117. 4s.; No. 37, 118. 4s.; No. 38, 119. 4s.; No. 39, 120. 4s.; No. 40, 121. 4s.; No. 41, 122. 4s.; No. 42, 123. 4s.; No. 43, 124. 4s.; No. 44, 125. 4s.; No. 45, 126. 4s.; No. 46, 127. 4s.; No. 47, 128. 4s.; No. 48, 129. 4s.; No. 49, 130. 4s.; No. 50, 131. 4s.; No. 51, 132. 4s.; No. 52, 133. 4s.; No. 53, 134. 4s.; No. 54, 135. 4s.; No. 55, 136. 4s.; No. 56, 137. 4s.; No. 57, 138. 4s.; No. 58, 139. 4s.; No. 59, 140. 4s.; No. 60, 141. 4s.; No. 61, 142. 4s.; No. 62, 143. 4s.; No. 63, 144. 4s.; No. 64, 145. 4s.; No. 65, 146. 4s.; No. 66, 147. 4s.; No. 67, 148. 4s.; No. 68, 149. 4s.; No. 69, 150. 4s.; No. 70, 151. 4s.; No. 71, 152. 4s.; No. 72, 153. 4s.; No. 73, 154. 4s.; No. 74, 155. 4s.; No. 75, 156. 4s.; No. 76, 157. 4s.; No. 77, 158. 4s.; No. 78, 159. 4s.; No. 79, 160. 4s.; No. 80, 161. 4s.; No. 81, 162. 4s.; No. 82, 163. 4s.; No. 83, 164. 4s.; No. 84, 165. 4s.; No. 85, 166. 4s.; No. 86, 167. 4s.; No. 87, 168. 4s.; No. 88, 169. 4s.; No. 89, 170. 4s.; No. 90, 171. 4s.; No. 91, 172. 4s.; No. 92, 173. 4s.; No. 93, 174. 4s.; No. 94, 175. 4s.; No. 95, 176. 4s.; No. 96, 177. 4s.; No. 97, 178. 4s.; No. 98, 179. 4s.; No. 99, 180. 4s.; No. 100, 181. 4s.; No. 101, 182. 4s.; No. 102, 183. 4s.; No. 103, 184. 4s.; No. 104, 185. 4s.; No. 105, 186. 4s.; No. 106, 187. 4s.; No. 107, 188. 4s.; No. 108, 189. 4s.; No. 109, 190. 4s.; No. 110, 191. 4s.; No. 111, 192. 4s.; No. 112, 193. 4s.; No. 113, 194. 4s.; No. 114, 195. 4s.; No. 115, 196. 4s.; No. 116, 197. 4s.; No. 117, 198. 4s.; No. 118, 199. 4s.; No. 119, 200. 4s.; No. 120, 201. 4s.; No. 121, 202. 4s.; No. 122, 203. 4s.; No. 123, 204. 4s.; No. 124, 205. 4s.; No. 125, 206. 4s.; No. 126, 207. 4s.; No. 127, 208. 4s.; No. 128, 209. 4s.; No. 129, 210. 4s.; No. 130, 211. 4s.; No. 131, 212. 4s.; No. 132, 213. 4s.; No. 133, 214. 4s.; No. 134, 215. 4s.; No. 135, 216. 4s.; No. 136, 217. 4s.; No. 137, 218. 4s.; No. 138, 219. 4s.; No. 139, 220. 4s.; No. 140, 221. 4s.; No. 141, 222. 4s.; No. 142, 223. 4s.; No. 143, 224. 4s.; No. 144, 225. 4s.; No. 145, 226. 4s.; No. 146, 227. 4s.; No. 147, 228. 4s.; No. 148, 229. 4s.; No. 149, 230. 4s.; No. 150, 231. 4s.; No. 151, 232. 4s.; No. 152, 233. 4s.; No. 153, 234. 4s.; No. 154, 235. 4s.; No. 155, 236. 4s.; No. 156, 237. 4s.; No. 157, 238. 4s.; No. 158, 239. 4s.; No. 159, 240. 4s.; No. 160, 241. 4s.; No. 161, 242. 4s.; No. 162, 243. 4s.; No. 163, 244. 4s.; No. 164, 245. 4s.; No. 165, 246. 4s.; No. 166, 247. 4s.; No. 167, 248. 4s.; No. 168, 249. 4s.; No. 169, 250. 4s.; No. 170, 251. 4s.; No. 171, 252. 4s.; No. 172, 253. 4s.; No. 173, 254. 4s.; No. 174, 255. 4s.; No. 175, 256. 4s.; No. 176, 257. 4s.; No. 177, 258. 4s.; No. 178, 259. 4s.; No. 179, 260. 4s.; No. 180, 261. 4s.; No. 181, 262. 4s.; No. 182, 263. 4s.; No. 183, 264. 4s.; No. 184, 265. 4s.; No. 185, 266. 4s.; No. 186, 267. 4s.; No. 187, 268. 4s.; No. 188, 269. 4s.; No. 189, 270. 4s.; No. 190, 271. 4s.; No. 191, 272. 4s.; No. 192, 273. 4s.; No. 193, 274. 4s.; No. 194, 275. 4s.; No. 195, 276. 4s.; No. 196, 277. 4s.; No. 197, 278. 4s.; No. 198, 279. 4s.; No. 199, 280. 4s.; No. 200, 281. 4s.; No. 201, 282. 4s.; No. 202, 283. 4s.; No. 203, 284. 4s.; No. 204, 285. 4s.; No. 205, 286. 4s.; No. 206, 287. 4s.; No. 207, 288. 4s.; No. 208, 289. 4s.; No. 209, 290. 4s.; No. 210, 291. 4s.; No. 211, 292. 4s.; No. 212, 293. 4s.; No. 213, 294. 4s.; No. 214, 295. 4s.; No. 215, 296. 4s.; No. 216, 297. 4s.; No. 217, 298. 4s.; No. 218, 299. 4s.; No. 219, 300. 4s.; No. 220, 301. 4s.; No. 221, 302. 4s.; No. 222, 303. 4s.; No. 223, 304. 4s.; No. 224, 305. 4s.; No. 225, 306. 4s.; No. 226, 307. 4s.; No. 227, 308. 4s.; No. 228, 309. 4s.; No. 229, 310. 4s.; No. 230, 311. 4s.; No. 231, 312. 4s.; No. 232, 313. 4s.; No. 233, 314. 4s.; No. 234, 315. 4s.; No. 235, 316. 4s.; No. 236, 317. 4s.; No. 237, 318. 4s.; No. 238, 319. 4s.; No. 239, 320. 4s.; No. 240, 321. 4s.; No. 241, 322. 4s.; No. 242, 323. 4s.; No. 243, 324. 4s.; No. 244, 32

English and American copper has maintained late rates at Paris, and Chilean is very firm, at 97½ per ton for disposable. At Havre, several lots of Chilean have been dealt in for delivery at future rates, at 98½; holders do not appear inclined to cede disposable lots below 97½; the stock at the end of March amounted to 3500 tons. During the month which has just elapsed no change has taken place. United States copper has been sold at Commerce, March 31, at 137½; the sale is noted of one lot of 15 tons of Lake Superior, Minnesota, at 129½ per ton. On the Dutch market the copper of the Society of Commerce has been held at 75½; one lot of 35 tons of English copper (rough cake) has been held at Rotterdam at 75½. The Hamburg market has remained without change; this place has received of late some supplies of copper from the North. At Berlin, Cologne, and Stettin transactions have been unimportant, and without variations in prices. The market for tin continues without activity; a small lot of Banca have changed hands, at 69½½. The market for lead at Amsterdam and Rotterdam has made 69½. The Paris market has been quiet, a little business at 123½. At Stettin, prices have been 120½; and English, 113½ per ton. On the various German markets, prices have been almost nominal. The situation of the lead trade is generally good. At Paris rough French has been dealt in at 227.16s., and Spanish at 237.4s. per ton. Soft Spanish has been sought after at Havre, at 21½, 21s. 16s.; at this price some 50 tons, first fusion, have found purchasers. At Rotterdam, Spanish has been sought at 11½½; Stolberg and Eschweiler, 12s.; and German, 11¾½. At Genoa 800 saumons of Italian and foreign lead have found purchasers at 197.16s. per ton. The stocks on hand in the Hamburg market have become nearly completely exhausted, and soft German is very firmly held. At Berlin the article has been sold very freely, and in good demand. At Cologne, prices have been firm, and without variation. At Stettin the market has been quiet, and the Brussels bourse German is quoted 207.16s. per ton; the sale of a lot of long bars also reported at rates which have been kept secret. Rough Silesian zinc maintains its price firmly at Paris, at 231.8s. per ton (warrants). At Havre zinc has been more freely held of late; several lots of very good marks, brought on the market at 221.8s. and 221.4s. for delivery in May, have not found purchasers, and would obtain with difficulty 211.16s. per ton. At Stettin, prices have been 211.16s. per ton.

With respect to the construction of lines of railway for the development of colliery workings, we may note the formation of a company for the execution of a line from Lille to the collieries of the Pas-de-Calais. The leading industrialists of the department of the Nord form part of the council of administration. The Ciudad-Real and Badajoz Railway Company has received a concession of a line from Belmez to Castillo de Almorochon, intended to accommodate the rich coal basin of Belmez-Espiel, which can furnish considerable quantities of coal of a quality equal to English combustible. A subvention of 140,000*l.* is to be accorded by the Government for the line, which will have a length of about 37½ miles. The Ciudad-Real and Badajoz Railway Company will derive very great advantages from the establishment of the line—considerable transports, and combustible at a cheap rate. Foreign coal, which is alone consumed at present at Madrid, now costs, burthened as it is with transport and customs expenses, 4*l.* 16*s.* per ton; but the Belmez Collieries can deliver coal to the line at 10*s.* or 8*s.* per ton. It is calculated that, as soon as the basin can use the economical means of transport which the Ciudad-Real line will offer to it, it will be enabled to forward annually more than 200,000 tons to Madrid and Fortalena. The Madrid, Saragossa, and Alicante Railway Company consumes annually not less than 60,000 tons, which it has been obliged to obtain hitherto from England, and which it will now seek at Belmez.

Among the dividends recently declared may be noted the following:—  
 Ss. per share as a second dividend for the exercise 1862-3 by the Belgian  
 Central Company for carrying out public works and constructing railway  
 plant; 3*l.* 12*s.* per share by the Sacré-Madame Collieries Company at Dam-  
 premy, Belgium, as the dividend for the exercise 1863; 10*s.* per share by the United  
 Collieries Company at Quaregnon; 1*l.* per share by the Société des Mines de  
 Furnaces, Ironworks, and Collieries Company; 1*l.* 8*s.* per share by the Fouchambault  
 Montpou, Torton, and La Pique Forges and Foundries and Commentary Collieries  
 Company—half payable April 15 and half Oct. 15; 5*s.* per share by the Loire Mining  
 Company in respect to the second half of 1863; 12*s.* 6*d.* per share on account of the divid-  
 end of the exercise 1862-3 by the Neuwallon Company for Lighting and Heating by  
 Gas; and 11 p*er* cent. in respect to the exercise 1863 by the Company for the Fabrica-  
 tion of Steel at Dülken, near Dresden.

The Wreckhills Ironworks, recently offered at public auction by Mr. Thwaites, at Middlesbrough, after slight competition, were purchased by Mr. G. De Maine, for the sum of 2700*l*.

A SHAREHOLDER enquired the amount of dues that the shareholders had to pay? THE CHAIRMAN said that the dues were £-24th, and there was a small minimum rent. The leases were held from Messrs. Buller and St. Aubyn.

A SHAREHOLDER enquired the amount of profits that had been expended upon the mine in providing it with plant, &c., or, in other words, that ought to have been carried to debit of capital?—THE CHAIRMAN said that something like 5000*l.* had been expended out of the profits in providing the mine with that which should have been paid for out of capital. But in a property so extensive as theirs, and which was known to contain enormous mineral resources, they must continue to expend a certain proportion of the profits in further development. He thought, however, his expectations with regard to the

Mr. E. COOKS supposed that the cost of raising the whole of the tinstuff now upon the floors had been paid for?—CAPT. ROGERS said that the only cost to be incurred was that for dressing and stamping, which would not exceed 6s. per ton. There were about 20 tons of tin on the floors. Under any circumstances, irrespective of any discovery that might be made, he had no doubt that the returns would fully meet the costs during the current quarter. In about five or six weeks hence they would be able to explore the rich bunch of tin upon the Standard lode, gone down below the adit.

MR. T. KING (of Calcutta) enquired if there was not a considerable amount of tin ground in reserve in different parts of the country.—Captain ROGERS said there were many small quantities of tin scattered all over the country.

MR. E. COOKE wished to know if there was any probability of the costs being decreased? He knew that their exploratory operations would not be diminished, and that, therefore, in that direction their expenditure would not be decreased; but there had been for some time past a considerable amount expended in increasing and improving the effective plant, and what he wanted to elicit was the information as to when that additional outlay was likely to cease, and the costs thereby diminished?—Capt. ROGERS said that the additional eight heads of stamps would commence working on Saturday, and he computed that the future costs would be reduced something like 160*l.* per month.

Mr. E. COOKS was anxious that shareholders should not lose sight of the important fact that nothing like a tithe part of their extensive test was yet developed. It was true that at the present season they did not meet under such auspicious circumstances as had been the case in the past, and, fully admitting the fact that they could not "intend" to do so, yet it was his firm opinion that the shareholders in Wheel Grylls had before them a long and prosperous career. They must not forget that the ground was very easy, and, therefore, very cheaply developed, and that there was an increased number of men employed on tutwork, under which circumstances it was but a reasonable probability, especially in a mine like Grylls, that during the current three months some important discoveries would be made; at any rate, a large additional quantity of tin ground would be opened.

Capt. ROGERS said that the Georgia might at any moment be as rich as ever. Fishers, the standard, and the North lodes are equally as productive as they had been for the past twelve months.—Mr. Ross having seconded the proposition that the accounts be passed and allowed, and the report entered on the minutes, it was put and carried unanimously.—The committee of management were re-elected.

THE CHAIRMAN said he wished to draw attention to a subject, which he considered of some importance. It had been the subject of conversation between several parties interested in the Georgia, East Wheel Grylla, Great Wheel Grylla, and Grylla Wheel Florence, as to the advisability of consolidating those four mines into one great and important undertaking. The subject was first mentioned to him by his friend, Mr. E. Cooke, with whom the suggestion originated. This at present was merely a suggestion, but if it

could be practically adopted—of which there seemed no doubt—it would result in many important practical advantages, and a proportionate amount of pecuniary benefit would necessarily accrue to the shareholders in each of the four mines.—Mr. T. KINO considered it an admirable suggestion, and one which, if carried out, could not fail to materially enhance the intrinsic value of each of the four properties.—Mr. RICH thought it one of the most desirable things that could be brought about.—Mr. E. COOKE said this question had received his most serious consideration since before he mentioned it to the Chairman. He was not prepared to know anything of a practical nature, but in his many years' connection with the mining interest, he felt that he was not presumptuous in expressing an opinion upon such a matter as that referred to by the Chairman. He felt certain that the consolidation of these four contiguous properties, each of

which was now making returns, could not fail to add very considerably to the value of all. He did not express this opinion without an intimate knowledge of the district, particularly of the four mines referred to. He was convinced that these properties consolidated would present one of the finest fields for the exertions of a large company, because, as he had already said, the whole of these mines were, more or less, productive, and each was provided with machinery. (Hear, hear.) It might, perhaps, be some time before such an arrangement could be effected, but he certainly looked forward with confidence to the time when these properties should be amalgamated into one gigantic mining enterprise. (Hear, hear.)

Captain ROGERS (in reply to a question) stated that he saw no difficulty whatever in the proposed amalgamation. Mr. T. KING said it was a suggestion which he (the Director) had not previously considered.

toral body should seriously consider. Fusion was the order of the day, and he could

The report of the stamts was read, as follows:—  
*April 9.*—We beg to hand you our report of the work done during the last three months and of present prospects.—Middle Lode: In the engine-shaft we have fixed a plunger from adit to surface (including 40 fms. 8-in. pumps), and sunk the shaft 6 fms., which is now down 10 fms. below adit; at this point there is a flat cut, and a level driven north 9 ft., and cut the lode, which is 4 ft. wide, worth 20<sup>1</sup>/<sub>2</sub> per fm. The adit level has been driven east 42 fms. 1 ft. 6 in., and has passed through ground that will be taken away on tribute. The ends at the present time are poor; in the back of this level there are two stopes working. No. 1, at 26<sup>1</sup>/<sub>2</sub> per fm., and worth 24<sup>1</sup>/<sub>2</sub> per fm.; and No. 2, at 5<sup>1</sup>/<sub>2</sub> per fm., and worth 15<sup>1</sup>/<sub>2</sub> per fm. At the 20 from surface is extended east 10 fms. 4 ft. 6 in.; the greatest part of which will be taken away by tributaries at about 10s. in 17.—Flower's Lode: The 10 under adit has been cleared 3 fms., and preparations made for driving the end east, when the water rose and stopped us from working there, but as we are now down 10 fms. under adit on the middle lode, we expect this water will be cleared away there again; it is a very important point, as there is a rich lode gone down in the bottom of the adit, about 15 fms. east of the present end. At the 17 from surface we have just commenced driving east; the lode is 2 ft. wide, worth 7<sup>1</sup>/<sub>2</sub> per fm. In the back of this level there is a stope worked at 3<sup>1</sup>/<sub>2</sub> per fm.; the lode being worth 10<sup>1</sup>/<sub>2</sub> per fm. We have also driven a shallow level 69 fms., sunk a shaft from surface, and communicated to this point, likewise fixed a plunger (including 7 fms. pumps) in the same for supplying the dressing-floors with water. At surface there have been fixed pulley-stands and rods from the engine to Firmstone's shaft, on middle lode, and also to the Lobby shaft, in all 105 fms.; two balance-bobs, erected shears, and a long run of launders for carrying water to the reservoir. At the dressing-floors we have laid down one round buddle, and three other hand buddles; fixed frunks, made slime pits, and other requisites for the same. We have cleaned and sold 2 tons 14 cwt. 1 qr. 21 bs. of black tin, amounting to 158<sup>1</sup>/<sub>2</sub> 5s. 1d. The quantity would have been a great deal more if we had had water to work the stamps. Having cut the lode at the 10, and obtained additional water, we can now keep the 12 heads of stamps at work, and the 10 stamps at the 20 from surface, with 12 heads of stamps, which will be erected so soon as possible, and put to work when there is a further increase of water sufficient to supply them all. There are employed in the mine 82 persons.—P.S. With regard to future prospects during the next quarter we consider our returns will enable us to erect the other 12 heads of stamps, enlarge the dressing-floors, and make sufficient profit to clear off the present debit balance of 258<sup>1</sup>/<sub>2</sub> 5s., and afterwards considerably increase our profits.—E. ROGERS, J. POPE.

THE CHAIRMAN had explained the different points of operation by means of a section, stated that he had the important and somewhat unexpected information to communicate, that within the past three or four days the middle lode, in the 10 below adit had been intersected, and had proved very rich in its character. Operations were forthwith commenced, and the lode had been found to be a considerable one, 300 feet in length, and 10 feet wide, therefore was of considerable value, inasmuch as the ground beneath the shaft could be wrought for 3/4 per cent. These two ends would open out very considerable reserves of tin ground. In the course of a few weeks, when the shaft would be sunk 2 or 3 fathoms deeper, the lode would be again cut, which would, of course, greatly augment the value of this property. Another important fact was that the shaft would be sunk through the middle lode, and the bottom of the shaft would be in the middle of the rich ends would then be commenced. It would be seen by the plan that an immense amount of tin ground had been discovered by the former workers in the levels above. A considerable expenditure had been incurred during the past three months in the erection of stamps, &c., and had there been more water their returns would have been considerably more; but now that the lode has been cut in the 10 below, sufficient water was being obtained from the stamps in full working order, and the state of the water, by report, the present debit balance of 2881. would be liquidated by the profit during the next three months, in addition to paying for the purchase and erection of 12 more heads of stamps, and after that period the profits would be considerably augmented, and dividends paid to the shareholders. In conclusion, he could not but congratulate his fellow-shareholders on the position of affairs, and on the satisfactory prospects of their property. He moved that the accounts be passed and allowed, and that the report be entered on the minutes.

Mr. JEFFREYS said that it appeared from the report and the statement of the Chairman that East Grylls was a better property than Wheal Grylls.—Capt. ROGERS said that such was the case at the present time.—Mr. E. COOKE asked Capt. Rogers what anticipated the returns would be when they got the 24 heads of stamps to work?—Capt. ROGERS said they would unquestionably make very good profits.

Mr. E. COOKE said he did not wish to bind Capt. Rogers to any statement; but, at the same time, he thought it would be satisfactory to the shareholders if Capt. Rogers would estimate as to the probable amount of profits that would accrue when the 24 heads of stamps went to work.—Capt. ROGERS said he thought it might be estimated that, three months after the stamps went to work, the profits would be about 250*l.*, or 200*l.* per month.—Mr. E. COOKE said his own impression was that East Grylls would prove the prize of the district; at any rate, its present indications certainly favoured the assumption.

Mr. FORD enquired the amount of tin on the floors?—Capt. ROGERS said that the reserves were very large, and there was a considerable quantity of tinstuff at the surface.—Mr. E. COOKE said, when they began to make returns of any importance from a shallow mine like East Grylls, the profits must be very considerable, because the cost of raising the stuff would be very small, as compared with a deep mine. He might remind his fellow-shareholders that of the several Grylls Mines, East Grylls was the closest to Trenging Hill, which was certainly not an unimportant fact.

Mr. W. WATSON (the pursuer) said that the aggregate cost had been considerably increased by the purchase of materials, &c., and for additional labour in the laying out of the floors, &c., but that the cost had not exceeded £2000. He could not say whether the work had been done for about 2000l., and that amount had not been exceeded. — Mr. T. KING said that the various questions which had been put by Mr. Cooke and others, and the information they had elicited, had certainly demonstratively proved that this property was of a much more valuable character than an unfitted shareholder would have supposed from a mere perusal of the report. He was not prepared to say if it would be a fair price for this property, but he was not prepared to say that it was not. He thought from this remark that the report was not explicit and clear, but there was much important and useful information which shareholders could glean by interrogation at general meetings, which could not be embodied in a report.

Mr. E. COOKE was found to find that the subject had been referred to by an independent shareholder, because it confirmed what he had upon several occasions expressed at general meetings. Mr. COOKE, however, was not satisfied with the information furnished, and he became possessed of every information connected with their property, and, yet, singularly enough, at such meetings shareholders seemed to studiously avoid asking questions, and thus did not avail themselves of the opportunity of gaining information. It was true, it was said that this might arise from the fact that shareholders were not versed in mining, and, therefore, felt some diffidence in making enquiries—it was from this reason that it developed upon brokers to make these enquiries, so that distant shareholders might know



through the report of the proceedings which appears in the *Mining Journal*, the exact position and prospects of their property. (Hear, hear.)

The accounts were then passed and allowed, and the report was ordered to be entered on the minutes.—A vote of thanks to the Chairman terminated the proceedings.

#### GREAT SOUTH CHIVERTON MINING COMPANY.

A meeting of shareholders was held at the London Tavern, on Thursday, at which Mr. W. LLELAN presided.

The notice convening the meeting having been read,

The CHAIRMAN said that the present meeting had been called for the purpose of considering, and if approved of adopting, resolutions for the future government of the company. Before proceeding to move the first resolution he might, perhaps, mention that the company was originally constituted in 25 shares, the holders of which had defrayed the whole of the costs up to March 1; but it was proposed to make a call sufficient amount to provide for the working costs for some few months, by which time, it was hoped, some important discoveries would be made.

Mr. J. HARRIS enquired if the lease had been properly secured, and if it contained anything but the usual covenants?—The CHAIRMAN said that the lease had been signed, and the lease would have to be taken up in six months hence. The lords were the same as those of West Chiverton. Mr. J. HARRIS wished to know, as all the costs had been paid up to March 1, the total amount of debts contracted since that period?—The CHAIRMAN presumed that the total amount would not exceed 500.

Mr. E. GOMPERTS said that before he introduced this mine to his friends he had it inspected by two accredited authorities—viz., James and Goldworthy, and such was the character of their reports that he (Mr. Gomperts) felt he was fully justified in advising his friends to take an interest in the Great South Chiverton Mine. He knew that no man could speak confidently of the success of any mine, but seeing that this property was situated in the richest lead district in Cornwall, and that it possessed lodes parallel to those which had proved, and were now proving, so continuous in West Chiverton, which was, perhaps, the richest lead mine in operation, he did think the shareholders had secured in Great South Chiverton a property which, to say the least, presented unusually favourable chances of successfully vying with its rich neighbours. All he could say was, that he hoped and believed their most sanguine expectations would be realised.

The following report was then read:—

April 14.—Since my last report we have been making further explorations on the backs of the lodes then discovered, containing the set in various directions, and bringing up the drain then referred to, the results of which are most satisfactory. The drain is cut for 40 fathoms in length, and is now 12 feet deep; the stratum is a light blue kilas, highly congenial for lead, and like the lead-bearing ground of West Chiverton. In two places we have thrown up gossan, which appears to be connected with the backs of lodes, but it is not sufficiently deep to determine. This cutting will, probably, lay open other lodes. We have discovered another east and west lode, 35 fms. north of the one marked furthest north on the plan; its bearing seems just the same as the others; it has a gossan back, but being just discovered we have seen very little of it. We have also discovered elvan, of which we have thrown up large quantities in different places, and there appears to be a large elvan course running through the middle of the set, which may be regarded as a very important discovery in opening on the back of the lodes previously discovered, we find they are strong and regular. The three east and west lodes underlie south; the north and south lode is nearly perpendicular; they contain a great deal of gossan and flocon, occasionally a little mundie, and look like the backs of large lead-bearing lodes. Some particles of lead and blende have already been seen in the north and south lode, and spots of lead in the middle lode, which is more than could be expected so near the surface. Looking at the position of this mine, the stratum being so similar to that of West Chiverton, the direction of the east and west lodes being just the same as the rich lodes there, their underlying the same way, their contact with elvan, and intersection by one or more cross lodes, irresistibly lead to the conclusion that it only requires development in order to a good lead mine being opened up.—J. NANCARROW.

The CHAIRMAN, in reply to a question, stated that at present they could not judiciously increase the expenditure of the mine, but if a lode were cut, which might be the case in a few days, the expenditure would necessarily be increased.

It was then resolved that the mine should be divided into 6000 shares, and that for the future working of the mine a call of 10s. per share be made, payable at the company's bankers, a discount of 5 per cent. to be allowed if the same be paid within 30 days.

Mr. GOMPERTS was exceedingly glad to find that the call just made had been so unanimously agreed to, for as they had every reason to hope they were going to have a great mine, the most politic course for them to pursue was to start with capital sufficient to provide the property with machinery, and to carry on operations for months to come.

It was then resolved that the Bank of London should be the bankers of the company. A committee of management was appointed, and Capt. J. NANCARROW was appointed the manager and purser, at a salary of eight guineas per month; and Capt. George was appointed the resident agent. Mr. H. Chapman was appointed secretary. A code of rules and regulations were then read and approved.

A vote of thanks to the Chairman was passed, which terminated the proceedings.

#### SOUTH EUROPE MINING COMPANY.

At the general meeting of shareholders, held at the offices of the company on March 31, the following report was read:—

"During the past year 5000 tons of ore has been raised from the Bultro Mine, and 5000 tons exported to England. The ore has found a ready market, and has proved of the same quality as previously. Strong representations have been made by the local director at the mine in favour of the immediate erection of cementation works, by means of which the less rich ores can be most profitably treated. The plans and estimates for these works were laid before the meeting. The directors consider that while the great value of the property has been placed beyond all question, a considerably larger expenditure is necessary for its development, and the present resources of the company cannot meet this. Very great reductions can be made in the cost of the ore by increasing the facilities of transport. They estimate a sum of 20,000, at least will be required to place the mine in a thoroughly paying position, irrespective of the floating capital. The construction of the greater portion of the road from the shipping port to Bultro has been conceded to a company, who are now proceeding with it, but a connecting link of about five miles is still wanting, which must be made by the South Europe Mining Company. The directors sent out in December last a highly experienced mining captain, recommended by Mr. Petherick, the company's consulting engineer. He describes the resources of the mines as abundant, both in ores for exportation and cementation, that it is an exceedingly valuable and profitable mine, and that more especially when cementation works are carried out. He looks on the mass of ore as practically inexhaustible, and all profitable. The directors consider that all the efforts of the company should be devoted to carrying out the works indicated; and although the importations of ore, in spite of every difficulty, show a profit, they think it would be unwise to declare any payment of interest at present."

The report having been unanimously approved and adopted, the usual routine resolutions were passed. Some conversation took place upon the state and prospects of the mine, and the meeting separated.

#### TRUTH'S ECHOES, OR SAYINGS AND DOINGS IN MINING.

The Mining Share Market has been active throughout the week, and a large amount of business appears to have been transacted. The fluctuations which have taken place have not been so wide as frequently occur, shares generally maintaining fair market quotations. The usual fortnightly settlement took place on Thursday, and considering the heaviness of the account and the tightness of the financial market, it passed off satisfactorily.

WHEAL SETONS have been freely dealt in at advanced prices.—WEST SETONS are enquired for at nominal figures.—NANGLIES has gradually improved, and in better demand.—CLIFFORDS have receded, and more freely offered.—EAST BASSETS, after an active enquiry, are more freely offered.—EAST BULLER has been extensively dealt in, especially the former, at improved prices.—EAST CARB BUREAS have been dealt in at lower rates.—SOUTH TOLGUS, STRAY PARK and TINCROFT are each offered at less.—WHEAL GRENVILLE has shared very largely in the transactions of the week, and advanced considerably; although some slight fluctuations have taken place, they left off firm.—EAST GRENVILLE has also changed hands largely at higher figures.

NORTH CROFTS have been freely dealt in, but are slightly weaker.—NORTH TREASURY and NORTH DOWNS have been less in demand.—GREAT NORTH DOWNS are in good request, at improved prices.—ST. DAY UNITED shares have been largely dealt in at higher figures.—WHEAL KITTY (St. Agnes) are rather quiet at present figures.—HALLENRIDGE and GREAT WHEAL BURY shares have been extensively dealt in, especially the former, at improved prices, but a reaction has followed the former, which are now offered at lower rates.—NORTH SHEPHERDS have had a rise, but are less active.—WEST CHIVERTON are rather quiet at market quotations.—CHIVERTON MOOR and CHIVERTON have been in better request.—EAST LOVELLS have been freely dealt in all the week, with but slight variations, but a considerable rise took place on Wednesday, in consequence of a reported improvement.—GREAT WHEAL FORTUNES have been firm at present quotations.—WHEAL GRILLS and EAST WHEAL GRILLS are in better request.—BASSET and GRILLS are less active.—MINERAL BOTTOM and EAST WHEAL VOR shares have been done at market prices.—GREAT WHEAL VOR are more freely offered.—FENDERS CONSOLES are in better request.—EAST PROVIDENCE, PROVIDENCE, and WHEAL MARGARET shares have changed hands at market quotations.

SOUTH CARADONS are sought for, but found scarce.—EAST CARADONS have been largely dealt in at improved rates, and show a tendency to further advance.—MARKE VALLEY, GUNAREN, and GLASGOW CARADONS are rather heavy at present prices.—TRELVANYS have been done at minimum prices, and MART ANNS have receded.—DRAKE WALLA are lower.—BEDFORD UNITED, GUNNIS LAKE (Clitters), and WEST MARIA and FORTUNE are in request at nominal figures.—HINGTON DOWNS are rather quiet.—EAST RUSSELL and CREBON are slightly firmer.

EAST CARADON.—The counter lode in the 50 east is worth 20s. per fathom; the 60 east, 10s.; the 70 east, 5s.; the 80 east, 15s.; and the 90 east, 30s. per fathom. New Lode: The 60 east, 8s.; and the 70 east, 5s. per fathom. South Lode: The 70 east, 10s. per fathom; the 70 west, 4s. per fathom; the whole of the ends being worth 148s. per fathom.

WHEAL CREBON.—The 96 east and west, is of a promising character, and looking well for improvement. The 84 west is at present poor. The other points of operation present favourable appearances, although at the present time not producing much ore.—NEW BIRCH TOR and VITIFER CONSOLS continue to open out remarkably well, and from the recent improvements there is every reason to calculate on increased returns. The tribute department is without any alteration, yielding fair quantities of good work, whilst the other surface operations are progressing satisfactorily, and the cutting down the shaft, preparatory to the completion of the engine, is going on rapidly.

EAST SETON.—The operations here are rather limited; the chief object at present is the intersection of a north and south lode; two cross-cuts being driven for that purpose, the intersection of the north lode is daily expected.

NORTH CROFTY.—The prospects here are improving. They have some very productive ground about Fread's shaft; in the 170 east the lode is worth 40s. per fathom, and the 160 east is valued at 45s. per fathom. There are several important points, where the lodes are looking well for early improvement, especially in the 43, west of Petherick's, and the 60 fms. level cross-cut south, where they have intersected the lode, which is looking well for copper.

WHEAL GRENVILLE.—The new lode has been intersected at the 110, and is valued at 20s. per fathom for tin. The 100, both east and west, is worth 10s. per fathom; and the 90 east is of the same value. The stope above the 90 west is worth 35s. per fathom. The

90 east is valued at 15s. per fathom; the rise above the 80 west is worth 20s. per fathom; the other productive places maintain their value and appearance.—WHEAL MARGERY is represented to have improved; the lode in America shaft is now worth 16s. per fathom, and the deeper levels are opening out far better than was anticipated. The 122 east is worth 9s. per fathom, and presents prospects of the most encouraging character.

EAST LOVELL.—An important improvement is reported to have taken place during the week in two or three places; the lode in the shaft, sinking below the 26, is stated to be worth 120s. The lode in the 20, referred to last week as having improved, is now worth 150s. per fathom, arising from a junction with a north lode; and the stope in the back is worth 100s. per fathom. The winze sinking below the 20, west of Peter's, is worth 80s. per fathom. They sold last week 9 tons 16 cwts, 12 lbs. of tin, realising 652s. STREVEY and CARMARL.—At the 95 west the lode continues to look remarkably well, and also the winze in the bottom of the 85, at which two points further improvements are anticipated, from the general appearance of the respective places.—GREAT WHEAL FORTUNE.—The lode in the 98, east of Hooking's shaft, and the winze sinking under the 90, east of Painter's, continues to look well, and has improved during the past week; and the 102 east is looking better.

From Mr. EDWARD COOKE:—The general tone of the market has been of a satisfactory character, and a large amount of business done. The amount of capital invested in British mining property is of such a limited character, as compared with that of some of the financial companies recently introduced to the public, that there is no such fear of a collapse as to be apprehended in many of the schemes lately formed, and in which the public have so eagerly invested their capital. The attraction seems to be the apparent high prospective dividends on account of the large profits some of the companies in question are making. If, however, the high premiums to which the price of the shares in the various banks and finance companies have attained are taken into account, it will be seen that the dividends contrast very unfavourably with that of many of our best mines, such as Tincroft, East Caradon, South Caradon, Devon Great Consols, East Wheal Lovell, Wheal Kitty (St. Agnes), and others that may be named. There appears to be a prejudice in the minds of a large number of the public against British mines, while the same parties do not hesitate to embark their capital in the various gigantic foreign mining schemes at enormous premiums. Surely there is greater safety in investing in our home mines, that may be inspected by any impartial practical agent at a day's notice. I will name EAST WHEAL VOR as one of the most legitimate enterprises ever brought before the public, and of a property that will, in all probability, give very large profits to the adventurers when it is developed. A good discovery of tin, which is almost certain to be made on the rich Wheal Metal lode, will cause a very great rise in the price of the shares. When I say discovery of tin, I allude to such tin deposits as exist in the same lodes in Great Wheal Vor, because already there is tin in good paying quantities discovered in East Wheal Vor, and which will be taken away by-and-by, when the operations are in full force.

EAST LOVELL shares have been in great demand, and have advanced to 16s. buyers. I have for several weeks past endeavoured to keep this mine before the notice of the readers of the Journal, as I have been of an opinion ever since I first visited the mine that its results would be most satisfactory. The mine has been developed, and I have taken it, and bought the shares, and now the pleasure of being enabled to realise a large profit. There are other mines which, like East Lovell, have not attracted that attention which, from their true legitimate character, they deserve. Among the low price mines I venture to assert that there is none more deserving of attention than NORTH CHIVERTON. This mine is in 6000 shares, on which a call of 20s. has been made, for the purchase of the mine, erection of an engine, and other requisite machinery, &c. After paying for the engine, and all other charges up to the end of March, there is a credit balance of about 3000s. in favour of the company, besides 50 tons of blende dredged for market, and another parcel in course of dressing. The engine will be set to work about the end of May or the first of June, when the lead lode will be operated upon, and I hope soon after to witness the first sale of lead, as it is known to exist in the mine, and only waiting to be raised, the only impediment at present being the want of the engine to drain the shallow levels, in which the lead has been discovered. The price of the shares is now 21s. to 22s. 10s. Before many months elapse I shall not be surprised to see them double this price, and they may, very probably, reach a much higher figure. North Chiverton is a property that will bear the inspection of any practical agent, and every facility will be afforded to anyone feeling disposed to have the mine inspected.

EAST WHEAL GRILLS is now assuming a position of importance. The engine is at work, and 12 heads of stamps in a short time other 12 heads will be fixed, when the returns of tin will be such as to give a monthly profit of from 300s. to 400s. A very important event has taken place lately—the cutting of the lode in the 10, below adit; it is valued at 25s. per fathom. In a few weeks the shaft will be down to the 20, when the lode will, no doubt, be found equally productive, and thus a good and profitable mine will be laid open. I have not the least doubt of its becoming a dividend mine during the present year. WHEAL GRILLS, although passing under a cloud just now, still contains the elements for becoming a great mine, and a great mine, undoubtedly, it will be when the new additional ground is developed. The adjoining mines, GREAT WHEAL GRILLS and GRITLY WHEAL FLORENCE, will, by-and-by, justify all that has been said about them. I remember when Wheal Grills and East Wheal Grills were at about the same price that Great Wheal Grills and Gritly Wheal Florence are now—4s. and 3s. respectively—that it was difficult to induce the public to believe the shares should be bought; since which the shares have advanced to 34s. and 14s. respectively. A similar rise in the price of Great Wheal Grills and Gritly Wheal Florence shares will take place. The whole of these four mines would form a splendid consolidated property, and if by some arrangement it could be brought about, the value of the respective mines would be enhanced to an enormous extent. PROSPER UNITED is now making a profit of some 400s. to 500s. premium. The shares are very low in price, and there are points coming off during the next few weeks that will, probably, add very considerably to the value of this property. WHEAL GRENVILLE is opening up a splendid mine, and will most probably be in the dividend list during the present year. WHEAL HOPS shares are now standing at such a price that they can scarcely fail to give a large profit on a purchase at present prices.

#### MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

The WELSH GOLD MINING COMPANY have this day sold 111 ozs. 11 dwts. of gold, their first produce, for 312s. 15s. 4d.

GREAT WHEAL VOR will sell this week over 43 tons of black tin. The prospects at Wheal Metal continue to be quite as favourable as last reported. The 147, east of Ivey's shaft, and the 147, 162, and 174, west of Metal, continue to hold out the same prospects of being productive from shaft to shaft. The 147, east of Metal shaft, is also a splendid lode.

CHIVERTON DISTRICT.—Being in this district a few days ago, I took the opportunity of visiting one or two of the mines in the neighbourhood. The first, of course, was West Chiverton, where I found the lode full of lead, and from the reports of the miners, and persons in the neighbourhood, I learnt it was looking better than ever, and bids fair to equal, if not surpass, the famous old East Wheal Rose Mine. I next went to NORTH CHIVERTON (worked last as Wheal Anna), and was at once struck with the similarity of appearance of the burrows, and of the stuff coming up from underground. I found kindly looking piles of lead and jack on the floors, and a pure busy at work making them marketable. The proprietors seem determined to give this property a thorough trial; the engine-house, for a splendid new 60-hp engine, being nearly completed, and from the very favourable appearance which the mine now presents, there is little doubt that shortly after the engine goes to work the hopes entertained by the proprietors will be realised. The mine is under the management of an experienced and successful lead miner, and everything being done as it should be.—*Newton, April 12.*

CAPE CORNWALL.—Operations have been commenced with vigour on this first-rate property. The erection of an engine-house, carpenter's and smith's shops, boiler, and account-house will be proceeded with at once, and no time lost to fork the mine. A deputation of the directors have been staying at St. Just, who have appointed Capt. Ralph Goldworthy as the agent, and given all the necessary instructions to carry on the works without delay. The utmost confidence is felt in the neighbourhood that the determination of the directors to work this property vigorously will be crowned with success. The lodes from the St. Just United Mines are going right away into the Cape property, and are richer as they near the boundary, and there is a strong probability that when they are intersected by the cross-cut from the engine-shaft they will turn out very productive. In a few months the shareholders will, doubtless, be rewarded by good news from Cape Cornwall.

WHEAL ESTHER.—I was surprised to see the progress made at this mine during the last few weeks, and it is gratifying to know there are so many large lodes laid open, and every one yet discovered containing a quantity of tin, of good quality. The stamps are in full operation, and great progress is being made in the construction of the dressing-floors. This will be completed in about a fortnight, and I should certainly calculate in two months from this date that a first-rate parcel of tin will be ready for market. I was glad to see such a large pile already passed through the stamps, and ready for the floors.

EAST DEVON CONSOLS.—Though the Devon Consols lode has not yet been reached, the spirit of the adventurers is by no means daunted, inasmuch as the lode is known to exist, having been seen close up to the cross-course. A slight change in the underlie would account for the delay. Nothing can look more encouraging; the fine white kilas comes to the surface, with occasional branches, highly mineralised, and carrying fine stone of ore, underlying towards the lode. The water has rather increased.

WHEAL CARADON.—Last week's Journal gave a very lucid and interesting report from the agents of this mine. Among other matters, mention was made that the lode commenced with spirit to cross-cut the 60 under adit, from Crutwell's engine-shaft, to intersect the south lode, of which there are several unsees. It is pleasant to know that since they have cut through the elvan on their progress everything indicates a speedy improvement in the mine.

NANGLIES.—The engine-shaft since Thursday last has very much improved: it is now worth 40s. per fathom.

EAST BOTALLACK.—The operations at this mine are progressing exceedingly well. The engine-house will be completed this week, and no time will be lost in getting the engine to work. The shaft is being sunk with all dispatch, and the lode improves every foot we sink. The ground is easy, and very congenial.

NORTH WHEAL CROFTY.—It must be highly satisfactory to the old adventurers, after the large amount of perseverance shown and money expended, to find their property getting into a profitable state of working, and the prospects so much improving. Should the recent discovery of copper, which is a very important one, in the bottom of the 43, west of Petherick's, hold good, and the lode in the 60 prove as profitable in development as is anticipated, dividends will soon be declared, as previous to this discovery the mine was at work at a profit.

The MORRIS SILVER-LEAD MINE, for the last 18 months, has been worked on the cost-book system, but at a next quarterly meeting it will be for the shareholders to determine whether it shall continue to be so conducted, or be placed under the Limited Liability Act. Fine specimens of the lead ore, barytes, blende, &c., from the mine, can be seen at the company's office. Abridged prospectus in another column.

ST. JUST CONSOLS.—The shareholders in this property will be pleased to hear that the operations which are being carried on present most pleasing prospects of success. Two of the directors and the secretary, Mr. Carthew, were at the mine on Wednesday, and spent very considerable time in going over the works, and minutely examined into the details connected with both surface and underground operations. The Guide lode, which is producing a quantity of tin, and has much attracted the attention of the mining authorities of this district, is improving in depth, and the tinstuff now raising shows a richer produce. The various lodes in the set are intersected by this deposit, and there can be little doubt it will exercise a highly beneficial effect upon them. After carefully going over the set, accompanied by Capt. Carthew, Capt. Williams (the agent), and Capt. Ralph Goldworthy, of the Cape Cornwall Mine, the party adjourned to the count-house to dinner, where the directors took the opportunity of expressing their approval of all that had been done for the best interests of the adventurers, and complimented the executive on the admirable manner in which the surface operations had been laid out, and more particularly the dressing-floors, which are most complete. The water-wheels, erected by Holman and Sons, of St. Just Foundry, are perfect, and are

driving 16 heads of stamps; indeed, these, together with the dressing apparatus, which includes a first-rate buddle and other machinery, enable the ore to be returned on a much cheaper scale than any other mine in the county. The situation of the property is most favourable for a good mine, and, if present prospects continue, the shareholders will soon see their capital returned in the shape of dividends.

DEVON COPPER MINE.—The interesting ceremony of starting a fine water-wheel, &c., took place last week, and the whole went off in a most satisfactory style. The ready command of a water-power equal to every necessity is of great value to the mine, avoiding the usual costly erection and maintenance of steam-power, and enabling the adventurers to develop at a trifling cost what is by some pronounced the finest looking lode ever seen in the county. The railway in course of construction will pass near the set, and will obviously greatly enhance its value. All is going on very quietly, but surely and steadily. A large number of the shareholders are persons of great mining experience, who know pretty well what they are about, and the mine will probably make little noise in the world until some day it becomes suddenly known that discoveries equal to any ever yet seen in British mining have been made. It seems to be the opinion of all who have seen this fine lode that deposits of ore cannot be at any great depth from the present workings.

GUNNIS LAKE (CLITTERS).—The announcement in last week's Journal of there being 90 tons of copper ore for sale from this mine on Feb. 21 should be 100 tons. LLANFAIR GREEN SLATE QUARRY.—A correspondent writes that this quarry is progressing rapidly, and that there is every prospect of its proving one of the most lucrative speculations hitherto entered into in this locality. Already extensive openings have been effected, and tunnels of great length have been driven. The quality and colour of the slates are highly satisfactory, and appreciated. Mr. Harvey, the manager of this quarry, is entitled to much praise for the able and scientific manner in which he conducts the operations. The situation of the quarry is most eligible, and within a comparatively short distance of Penryn quay, to where the slates can be conveyed at a very trifling expense, and shipped to any part of the world.

#### PORT AUGUSTA AND NORTHERN RAILWAY COMPANY OF SOUTH AUSTRALIA (LIMITED).

This Australian enterprise is founded upon a right principle, and may be accepted as an acknowledgment on the part of the colonial authorities that the plan by which the capital for the Victorian and other lines has been furnished is not the most suitable to a young and comparatively unpopulous settlement. There are natural riches in abundance, but it is ascertained that a railway, even from promising mines to an excellent harbour, especially when extending to nearly 100 miles, is not likely to be established except either upon a principle of guarantee, which could scarcely be furnished in this instance, or on that of a large and valuable subvention in the shape of grants of land. The Local Legislature has accordingly conceded to the company the whole of the land occupied by the railway for a breadth of two chains; and also blocks of land equal to two square miles for every mile in length traversed by the railway, selected on either side, such blocks not to exceed twenty square miles in area. This grant is equivalent to an area of 128,000 acres for a length of 100 miles, irrespective of the land required for the line itself. To provide payment of interest during construction the company will dispose of a portion of the 128,000 acres, and as the mineral district commences at a point about forty miles beyond Port Augusta, and thence extends for about 160 miles, the minerals must themselves produce a considerable profit. The Government engineer is of opinion that the line or tramway may be constructed for 2000s. per mile, and hence the capital is fixed at 300,000s., in shares of 5s. each, but only half of the number is to be issued at present.

It should not be overlooked by intending investors that there is an enterprising and prosperous mining company in the immediate neighbourhood, and that it is this commercial body which is actively moving in the matter. The colony is, of course, desirous to encourage labour, and to provide for settlement; but the Yudanamatana Copper Mining establishment has closer, if not higher, purposes than the mere progress of South Australia. It has an enormous produce to export, and is prepared to provide a vast and regular traffic from its own resources. In addition to these productions, it appears that there are already more than 200 applications for mineral leases, for an extent of country five times the area of Cornwall, all of which is represented as being rich in mineral wealth. The working of some mines recently opened corroborates this impression, and from one alone—the Blinman—belonging to the Yudanamatana Mining Company, about 5000 tons of copper ore have been produced within eighteen months from the commencement of operations.

The conveyance of produce from the immense pastoral districts which surround this territory is calculated to itself to provide 15,000s. per annum, and the minerals may as surely be calculated as equal to a like amount. Then we are led to a further conclusion, namely,—"That the line would be used more or less by the northern settlers, occupying an area of not less than 10,000 square miles, for the carriage of stores, wool, and other produce; also for the passage to and fro of the migratory labouring population (a tolerably numerous class now); and it would likewise be available for, and hailed as a great boon by, the settlers in the new country, far north and north-east, or west, which has recently been discovered, and is now in course of being stocked."

The geographical position of Port Augusta, which ought to be looked at on the map, is of paramount importance in a consideration of these matters, the more especially as it must eventually become the entrepot of the commerce of this portion of the colony, and which embraces most extensive pastoral and mineral districts. Again:—"Hills, abounding in minerals, called Flinders' Range, commencing on the eastern side of Spencer's Gulf, and extend 200 miles to the north of Port Augusta. Many valuable copper mines have been discovered, and some of them are now being worked; but the development both of the pastoral and mineral resources of this part of the colony is greatly retarded by the want of easy communication with the port of shipment. Flinders' Range is bounded to the westward by a perfectly level country, which presents no impediment whatever to the formation of railways."

The cost of a single line, adapted for either horse or steam-power, has been estimated at 2000s. per mile, and it is even probable that it might be constructed within this estimate, seeing that there are no earthworks of any account nor expensive bridges to be provided, and so we conclude that, with a moderate exercise of faith and patience by investor, and a becoming energy on the part of the respectable and practically intelligent board which ushers the project into notice, this Port Augusta may well become one of the best paying properties in Australasia.—*Railway Times, April 9.*

COAL IN BRAZIL.—Under date Rio de Janeiro Feb. 10, Dr. Reginaldo Moniz Freire writes that the coal mine of Iguarua, between the Rivers Candioti and Iguarua Chico, in the province of Rio Grande do Sul, was not discovered, as is stated, by Mr. Nathaniel Plant, the English engineer, who has only recently examined and recognised its great richness, and sent reports and samples of his explorations to London and Manchester. The discovery of this mine was due to the late Guilherme Bonilich, and the Imperial Government by the decrees of Feb. 6 and Oct. 9, 1863, conceded to Senhor Louis Bonilich the privilege of working this mine for 90 years, himself or by means of a company, for the present moment on the mine at Iguarua having the necessary surveys, with a view to the construction of a railway to convey the produce of the mine to the port of embarkation, and from whom we hope to receive in a little time the plans of this line, together with information of a most detailed character, has found this mine not only to be of prodigious richness, but that the mineral is also of superior quality, and would continue to improve in proportion as the workings were carried to greater depths. It appears from other advices that the nearest point to which the Iguarua coal approaches the port of embarkation is about 20 miles above the mouth of the Iguarua, and that the railway carriage will be under 20 miles. The coal in the Iguarua district is of great depth, and much can be wrought by open quarrying. Another field exists near Porto Alegre, and a third, 80 square miles in extent, in the province of San Catarina. Much interest is attached to the discoveries by the Brazilians, who now import about 250,000 tons per annum, at nearly three times the price they would have to pay for Brazilian coal. The coal is declared to be bituminous, and well adapted for steam and smelting purposes; and since it is certain that if the coal exist in the abundance stated a royalty of 6d. per ton would give enormous returns to the owners of the concessions, it is thought that an offer upon those terms may be made to English capitalists. The necessary funds for energetically working the deposits may thus be easily obtained, whilst the "bird in the hand is worth two in the bush" principle of attempting to sell the property altogether to the English would not be likely to succeed, as the would be, at least, *prima facie* evidence of want of confidence on the part of the vendor. The proposition to forgo all purchase money, and rely upon royalty, shows such thorough honesty of purpose that it is sure to be regarded with favour in England.

COAL STOCK DIVIDENDS IN NEW YORK.—The Delaware and Lackawanna Company declared, July 7, 5 per cent. in cash, and further dividends in stock: July 20, 10 per cent.; Oct. 31, 15 per cent.; and January 7, 20 per cent.; making a cash dividend of 5 per cent. and stock dividends of 45 per cent., which, at the present market value of the stock, is equal to 95 per cent. in cash. The Delaware and Hudson Canal Company divided, in cash, 6 per cent. in June, and 10 per cent. on Feb. 15 last. The board of directors now propose giving another dividend, payable in new stock of 16 per cent.; and have issued a circular calling for a meeting of the stockholders April 21 next, to confirm this proposed dividend, the practical result of which will be equal to 40 per cent. in cash, when estimated, as follows: take, for example, six shares at par, \$100 is \$600, on which the equivalent of one new share will be issued as a dividend, and this share, at about the present market value of the stock, \$230; and a further dividend, consisting of the right to subscribe for one new share at par, will sell for \$230; less paid in to make full stock, \$100—\$130; equal to about 60 per cent. dividend in cash, \$380.—*United States Railroad and Mining Register.*

COPPER MINING IN LAKE SUPERIOR.—The total amount of capital invested in the fee-simple and development of the mines now working, not including the value of the metal produced, is estimated at about \$6,000,000, whilst the stocks are worth over \$15,000,000. The aggregate amount of copper produced in 1863 was not less than 9000 tons of stamp work, barrel, and mass, or about 7500 tons of ingot, worth at its present value over \$6,000,000, or the total sum of money thus actually invested; let as the largest portion of it was, probably, sold at an average of 35 cents. per lb., the aggregate receipts of sales will not be much over \$5,000,000, from which about \$1,000,000 have been, or will be, divided among the shareholders, with still full treasuries, so far as most of the mines are concerned.

The CLEVELAND IRON TRADE has been very quiet lately. The demand for all classes of pig and manufactured iron has been comparatively limited, owing, no doubt, chiefly to the unsettled affairs on the Continent. Buyers are not inclined to make any long contracts, having the impression that the prices will soon fall; and they are content to order only to meet their present requirements. Messrs. Pease, Hutchinson, and Ledward have commenced rolling. Messrs. Fox, Head, and Co. are pressing rapidly with their works, and Messrs. Hooton and Co. are busy in erecting a new puddling-furnace, the latter firm are going to add about 1000 puddling-furnaces to their present number. Messrs. Stevenson, Wilson, Jacques, and Co. are preparing to proceed with their blast-furnaces, as are Messrs. Cooke, Bray, and Co. The change in the iron trade of this district is not such as to check, to the least apparent extent, the amount of work done, but orders are not so plentiful, and certainly not so much pressed, as they were a few months ago, and prices have fallen a few shillings.—*Darlington and Stockton Times.*



## Mining Correspondence.

## BRITISH MINES.

**ARUNDELL TINWORKS.**—(Canivet).—C. Pengelly, April 13: Since my last report it has been found necessary to change the name of this property to that of the *Repery Tinworks*, and this has been done accordingly. I have much pleasure in stating that the preliminary arrangements have been carried out, and that, with the exception of the dressing-floor, not yet completed, the works, roads, and machinery are in perfect order. The engine and stamps have been at work for about three weeks, and all is going well. As regards the mine, I can say confidently that it presents unusual prospects. Two lots of great value have recently been discovered and laid open, and there is enough tin to stamp for years to come. I have had samples analysed by Mr. J. Penberthy, of the Woolley-lane Tinworks, with the following results:—No. 1, 6 cwts. 2 qrs. 2 lbs.; No. 2, 3 cwts. 0 qr. 10 lbs.; No. 3, 3 cwts. 0 qr. 10 lbs.; No. 4, 10 lbs.; No. 5, 1 qr. 12 lbs., of black tin per ton of stuff. We are now engaged stamping the stuff mentioned above as No. 5, reserving that from which samples Nos. 1, 2, and 3 were taken for separate treatment. No. 4 specimen is the worst I could find. These results speak for themselves. By the second week in May I hope to have a good parcel of tin for market, and I have no doubt that in a few months we shall be paying good dividends.

**BAGNOL.**—W. Hosking, April 14: The points of operation at this mine are assuming much more favourable and valuable appearances than for some time past, and such as lead us to expect permanent and valuable courses of tin at deeper levels, to reach which our shaftmen have nearly completed cutting ground for plant, cisterns, &c., in the 16, preparatory to sinking Proper engine-shaft. The 16 end, driving west of this shaft, contains a lot of 2 ft. wide, 9 in. of which is very excellent work for tin, worth 10l. per fm. We have set a slope in the back of this level, where the lode is 1 ft. wide, producing work for tin, worth quite 7l. per fm.

**BEDFORD CONSOLS.**—Capt. Mitchell, April 14: In the middle adit east the north lode is about 2 ft. wide, composed of spar, mundle, prlan, flookan, white iron, a little tin, and spots of copper ore, and looks promising for an improvement.

**BOSCAWEN.**—J. Evans, April 13: The lode in the 70, west of said shaft, is 18 in. wide, worth 16l. per fathom for copper ore. The lode in the slope in the back of this level is worth 16l. per fm. We are driving a cross-cut south at the 70, from Hunter's shaft, to intersect the south lode; ground favourable; we hope to meet with the lode in 2 or 3 fms. more driving. The lode in the 60, west of said shaft, is 18 in. wide, worth 7l. per fathom for copper ore. The lode in the slope in the back of this level, east of No. 3 winze, is worth 12l. per fm. The 50 end is suspended, being near the boundary. The men are engaged clearing the 30 at the counter-shaft. We are driving a cross-cut south at the 14 from Kite's shaft, to intersect the tin lode, and hope to meet with the lode in driving about 5 fms. more.

**BOTTLE HILL.**—J. Eddy, April 13: The lode in the slopes west of Williams's shaft, in back of the 12, has increased in size, now about 7 ft. wide, and the tinstuff raising is of a better quality. The lode in the slopes east of shaft, in back of the 24, is without alteration. The lode east of Williams's shaft, east of slide, in the 24, has become more settled; the lode is larger, and producing better work for tin than when reported on last week. The lode in the slopes in the back of this level is turning out moderate stamps work. I intend to send away samples on Friday next, and shall have about the quantity of tin promised.

**BRONFLOYD.**—Jas. Lester, April 13: The lode sinking through by the winze from the 40 to meet the 52 when up is now down 8 fms. 3 ft.; it is composed of a strong mixture of quartz, with small strings of lead ore intersecting. The lode in the 52, west of engine-shaft, is easier for progress, and contains a slight mixture of lead, but not sufficient to put a value on; this level is now in about 5 fms. from shaft. The slopes above the 40 will yield on an average about 15 cwts. of lead ore per fathom. Dressing, &c., as usual. The 50 tons sold on the 31st ult. will be shipped in a day or two.

**DRYNGWIG.**—F. Evans, April 14: The lode in the engine-shaft, sinking below the 90, is 1 ft. wide, principally of blende, with good stones of lead ore occasionally; we do not know how soon we may meet with a change for the better there, as we are convinced the runs from the old mine still remain to be explored. In the 90 west the lode is 1 ft. wide, worth 1/2 ton of lead ore per fathom. In the 90 east the lode is 2 ft. wide, worth 1 ton per fathom for lead; this lode is made up of spar, blende, and lead, but ground rather hard for driving. There are five pitches in the roof of this, and the same level west is producing 1 1/2 ton per fathom. A pitch in the bottom of the 75 east is worth 1 1/2 ton per fathom. Another 20 fms. further east will produce 2 tons per fathom. A pitch in the back of the same level is worth 15 cwts. per fathom. A pitch in the bottom of the 75 west is worth 15 cwts. per fathom. We are still clearing the 75, which is full of blende, with good stones of lead ore. The 60 will produce from 15 cwts. to 1 ton per fathom, but the ground is hard for opening. We are pressing on everything connected with the mine as fast as possible, and we expect the whim-engine to work next week. The 40 tons of lead ore sold to-day brought 15l. 4s. per ton. Tenders for the 20 tons of blende have not yet been received.

**DRYNGWIG.**—F. Evans, April 14: In a few days we shall complete the dividing and casing of the engine-shaft to the 20, and put in penthouse, &c.; we will then commence sinking for a 30 fm. level with all speed. There is no alteration in the 20 east, on the north part of the lode, since last reported. The cross-cut north on the lode, west of shaft, is driven 8 ft.; stones and strings of lead ore are met with. There is no appearance of the north wall yet. The rise opposite the engine-shaft is 4 fms. 4 ft. high. We hope to effect a communication with the 10 this month. The lode in the winze sinking under the 20, west of shaft, is without change since last described, worth 20l. per fm. for lead ore; ground has been cut, water taken up, and tackle fixed, therefore I expect to make good progress in sinking in future. All other work in the mine, including dressing, is going on as fast as possible.

**CAPE CORNWALL ST. JUST CONSOLIDATED (Tin and Copper).**—R. P. Goldsworthy, April 14: We are now preparing the old smith's shop for fixing a bellows and anvil, and shall commence taking out the foundation for the engine and boiler-houses and other necessary work to-morrow. We hope to get up the engine-house, put in the engine, and begin to fork the mine in about three months. We shall fork and clear the mine with all possible dispatch, as from reliable information when the mine is in fork we shall begin at once to return tin from the lodes in the eastern levels, and push on the western end on the course of the lodes, which are of a highly promising character for the production of copper ore.

**CARADON CONSOLS.**—Wm. Rich, April 12: The north lode, in the 80 west, has a very promising appearance; it carries stones of ore, with plenty of mundle and kindly floor-spar. The ground in the cross-cut south is rather harder than it has been, but I think it will soon again. There is nothing new to notice in the ends going east and west on the engine lode.

**CHARLOTTE UNITED.**—P. Floyd, R. Johns, April 14: The engine-shaft is sunk 8 ft. below the 90; the lode is 2 ft. wide, producing some good stones of ore, and at present the lode is looking far more promising than it has for some time; it is composed of carbonate of iron, peach, mundle, and rich copper ore; there is little or no spar in the lode, but it is our opinion that as the shaft goes down we shall find the lode to improve in size and value. We have set to the shaftmen to sink 2 fms., 4 ft. 10 in. drawing-lift, cut cistern-plate, put in borer and cistern, for the sum of 64l. The 90, west of engine-shaft, is driven 13 fms.; the lode in this drive has been unproductive, but at present the lode is larger, about 18 in. wide, producing a little ore, but not to value. In the 80 west the lode is 18 in. wide, worth 4l. per fm.; we hope in driving about 3 fms. more that we shall get through the hard greenstone we have at present in this end, when it is quite probable the lode will take a change for the better. In the bottom of this level, 14 fms. west of the engine-shaft, we have four men cutting a winze pit, &c., in order to sink a winze, where the lode is 18 in. wide, worth 6l. per fm. To the west of this winze about 14 fms. we shall sink into another winze, where there is a good lode cut in 12s. 11 ft. In the 70 west the lode is 18 in. wide, opening tribute ground that will cut in 12s. 11 ft. In the 70 east the lode is 1 ft. wide, unproductive. The lode in the 60 west has been small and hard; at present the lode is more promising, with a branch of ore about 4 in. wide, and in about 3 or 4 fms. more driving we shall get through this hard bar of ground, when we hope the lode will resume its former features. We have suspended the 60 east for want of air, and have put the men to open east and west on the new south lode at this level, which is seen in the 60 cross-cut, south of Dobbin's shaft. Behind the 60 east we have set a pitch to two men, at 12s. 11 ft. In the 50 west the lode is 2 ft. wide, composed of spar, carbonate of iron, mundle, and copper ore; by extending the lode about 12 fms. more we shall intersect the cross-course, where we anticipate finding rich stones of ore, as was found to the north and south on the same. In the 80 cross-cut north we have cut the north lode; it is 18 in. wide, and is yet in a disordered state, being near the slide lode, driven east 5 ft. and west 4 ft. Our tribute department is much the same as usual.

**CLARA UNITED.**—J. Lester, April 13: Mywernog: The lode in the 40, east of engine-shaft, is without alteration; the lode in the same level west is of a very promising character, being a mixture of lead and blende for the width of the level.—Dolwen: This level is now extended north 18 fms. 3 ft.; the ground is very hard for driving, and it is now being done by hand labour.

**CLEERS HILL.**—Cocks, April 14: The men that were put to work to open on the north lode have cut it, 3 ft. wide, worth 1 1/2 cwt. of tin to the 100 cwts. of tinstuff. I have also put them to cut on the middle lode about 160 fms. further west than where we have been working, and have cut the lode with a pitch of 10 ft. for tin.

**COED MAWR POOL.**—M. Wasley, April 13: It has totally surpassed us to keep the part of the delay. We forked to the bottom on last Sunday night. The weather is, however, so excessively dry that we cannot calculate on working above a day or two effectual trial in the 20. I very much fear this spring will prove too dry for us to make any winzes in the bottom of the 20, and intersect the junction of Fridd and Chandler's lodes. The sold for several months has been chiefly raised from these points, which proves the lodes to be productive in depth. The ore is also brighter and cleaner in quality than what has been raised in the upper ground. The water being in the bottom of the 3 shaft I placed two men to drive a cross-cut north-east of No. 1 shaft, in shallow ground, which has in stones of ore. We have a considerable length of lodes discovered in shallow ground, and of the ground is cheap and easy worked, and a moderate quantity of ore would pay, in course of dressing is about 5 tons.

**CONNORREE.**—Captain Bishop, April 9: Deep Adit: There is more water coming from the end, which makes our progress slow; no change in the stratum.—The 64, west of Engine-shaft: This very important part of the mine is looking very promising indeed, little improved for copper, and is yielding good black and yellow ore. An improvement in the lode is still looking well, yielding better ore and less sulphur than heretofore. The past, yielding good sulphur and copper ore. At the 10, west of old cross-cut, there is no able for ore, but it may shortly change for the better. Tracey's shaft, is looking so favourable intersected at the 10 cross-cut, south of Tracey's shaft, during the week. A large quantity of good sulphur has been cut in the 20 fathom level cross-cut, south of new shaft. The slopes on great copper and other lodes are much the same as last.

**CRENFER AND WHEAL ABRAHAM.**—J. Vivian, April 14: We are now ready waiting for the large stone to be brought from the Great Alfred engine-house, which will be done immediately. We shall commence building one of the steam-whim and capstan by a strong staff of masons. The boiler builder with his assistants are being rapidly built up. We have two of the large boilers on the mine, and a long tube or reservoir for heating the water before it passes into the boilers. Two more boilers will also be brought on the mine to-morrow. The 90-in. cylinder engine is being delivered as fast as possible, and the necessary water-courses, &c., and the sinking of the water-wheel pit for the most satisfactory.

**CROWN CONSOLS.**—J. Seymour, April 13: The men have just cut into the lode at the 30. I have no time to report on it yet, and am too unwell to go underground.

**CUDDRA.**—F. Puckey, E. Dunstan, April 14: In the 105, east of Walker's shaft, we are still driving in the killas under the lode, which is favourable for progress. In the same level, west of the shaft, we are driving through a disordered piece of ground, mixed up with spar, killas, and capel, and at the present time is spare for driving. The lode in the winze sinking below the 90 is 5 feet wide, composed of quartz, peach, capel, and gossan, and at present unproductive for tin. In the 90 west no lode has been taken down during the past week. In the 75 west we are also driving in the killas under the lode. In the slopes behind this end, and likewise the slopes in bottom of this level, west of the winze, no lode has been taken down for the month; in the slopes in back of this level, west of the winze, the lode is still looking very well, which is 7 ft. wide, and for about 2 fms. in length is worth 50l. per fm.; this run of tin ground appears to be making up before the 60 end, and which is in whole ground from that level to the surface. The slopes in back of the 60 are without alteration, still worth 10l. per fm.

**CWM ERFIN.**—April 12: The lode in the 20, going east of the boundary, is small and unproductive. The lode in the rise over the back of this level, 20 fms. behind the present end, is 5 ft. wide, and worth 15 cwts. of lead ore per fm. We have about 2 fms. more to rise here to be at the required height for the 10 fm. level. We have three slopes in course of working over the back of the 20; the lode varies from 3 to 5 feet wide, and will turn out on an average 12 cwts. of lead ore per fm. The lode in the 10, going east of the boundary, is 1 yard wide, composed of clay-slate, copper, quartz, and lead ore, worth 1 1/2 ton of the latter per fm., and shows symptoms to further improve. The rise in back of the 10 has slightly improved; the lode is 18 in. wide, and worth 15 cwts. of lead ore per fm. There are 22 men employed in the different slopes over the back of the 10; the lode varies from 3 to 6 feet wide, and will turn out, on an average, 1 ton of lead ore per fm. The adit level, going east of the boundary, has continued to look very well since the last report; the lode in the present end is 3 ft. wide, carrying two well-defined walls, and worth full 2 tons of lead ore per fm. The lode in the slope over the back of the adit level, 40 fms. east of the cross-cut, is 1 yard wide, and worth from 3/4 ton to 1 ton of lead ore per fm. Good progress has been made in the new cross-cut going north from the side of the adit; the stratum in which this level is now going through shows every indication of our meeting with something good. I should remark that we have here laid down a good railroad into the present end, and everything is being done to facilitate the progress of the same.—Tribute: The lode in the pitch in bottom of the 32 fm. level, 45 fms. east of the boundary, is 2 ft. wide, and worth 1/2 ton of lead ore per fm. The lode in the pitch over the back of the 32 fm. level, 90 fms. east of the cross-cut, is 2 1/2 ft. wide, and worth 8 cwts. of lead ore per fm. The lode in the pitch in back of the 10 fm. level, 40 fms. east of the cross-cut, is 4 feet wide, and worth 18 cwts. of lead ore per fm. All our machinery is in good working order, and we are making fair progress towards the next sampling.

**DALE.**—E. Nines, April 14: The Pipe vein continues to yield well. We have resumed working on the new discovery, which is producing some good ore.

**DAREN.**—R. Williams, April 13: The sinking of the shaft under the 10 is proceeding favourably, and the north wall by which we are going down presents a very promising appearance, showing spots and some good stones of ore, and seeming to indicate a good lode inside; we have not cut into it, nor shall we for fear of cutting down the water from above, which is now very little, and is of highly favourable consideration, in sinking without a lift as we are. The slope in back of the 10 has improved since my last report, being now worth full 12 cwts. of good silver-lead to the fathom, and sloping at 50s.; we are lengthening the slope upwards, prior to filling the stuff with the stuff from the adit, which we shall continue while we can do so to advantage. At the surface we are busy engaged in the dressing, but the crop dressing of the stuff brought previous to suspending the bottom slope for the purpose of sinking the shaft, is nearly completed; we have, however, some of all, which it is of consideration, to dress over and clear from the floors so that when the shaft shall have been sunk to the intended depth, and our slopes opened, we may have no impediment to our dressing operations. The carpenter has lately been engaged in putting in repair the second circular buddle for present and future requirements. We shall proceed at once with the erection of the drawing machine, which when completed will be of much importance in reducing the cost and facilitating the discharge of the mine.

**DEVON COPPER.**—Well, April 12: On Thursday last the water-wheel was set to work, and went off very satisfactorily. We shall now resume sinking the engine-shaft, which will be pushed down as fast as possible to prove this large and promising lode. We shall also resume driving the adit level east, where our prospects for meeting with a productive lode are very good.

**DOLCOATH.**—C. Thomas, W. Provis, J. Tonkin, J. Thomas, J. Bawden, April 11: South Part of Main Lode: The engine-shaft has been set to sink below the 278; the lode contains a little tin, but is not of much value. The 278 is driven 3 fms. west of engine-shaft; the lode is large, and producing a little tin. The 254, west of old sump, is worth 10l. per fm. The 261, west of Dunlin's Garden shaft, is worth 26l. per fm. We expect the slope to intersect the lode in the 220, west of Dunlin's Garden shaft. The 210, east of new east, is not of much value. The 212, west of Harriett's shaft, is at present unproductive, the lode being disordered by elvan. The 200, west of Wheel Bryant shaft, is worth 38l. per fm. The winze under the 190, west of Wheel Bryant, is worth 25l. per fm. The 190, east of Valley, is worth 20l. per fm. The 190, west of western cross-course, is producing a little tin, but not enough to value. The 160, west of Wheel Killas, is worth 20l. per fm.—North Part: The 278, east of engine-shaft, is unproductive. The winze under the 266, east of engine-shaft, is sunk 5 fms.; the lode is worth 100l. per fm. for 10 ft. long. The 266, east of engine-shaft, is worth 40l. per fathom; the 266, south, west of engine-shaft, has reached the south part of the lode, which is not of much value. The 254, east of new east, is worth 20l. per fm. The winze under the 242, east of new east, is worth 25l. per fm. We expect to hole this winze to the 254 shortly. The 242, east of new east, is worth 40l. per fm. The 242, west of old sump, is worth 25l. per fm. The 230, east of new east, is worth 35l. per fm.—North Central Lode: The 20, west of cross-cut, north of Rule's shaft, is unproductive. In the south part of the mine we have cleared the adit to the end, which is about 70 fms. to the west of Plantation shaft; we are now driving south in search of the lode.

**DOLFRYNOG.**—K. Kirpatrick, April 11: No. 3 shaft is now sunk its full depth. I find we must make a short cross-cut to get into No. 5 level; the reason of this is because the No. 5 level is large, and though it would not have answered the purpose it is intended—drawing. I have not yet been able to set it, the men not agreeing to Rees's price. Mr. Darlington was here on Friday, and saw the machinery at work. Some slight alteration had to be made in the staying of the stamps; this was done by J. Walters on Saturday, and now there being nothing further for him to do he leaves to-day. We have to alter the road buddle a little, but this will be done in a day or two. The men stopping from No. 4 level, towards the Fownog level, have been cutting some beautiful quartz this week.

**EAST CAMBRIAN (Gold).**—C. R. Dixon, April 11: At the East Cambrian I have re-set the champion level, to four men, at the same price as last month—5l. 10s. per fathom; the 266, south, west of engine-shaft, has reached the south part of the lode, which is not of much value. The 254, east of new east, is worth 20l. per fm. The winze under the 242, east of new east, is worth 25l. per fm. We expect to hole this winze to the 254 shortly. The 242, east of new east, is worth 40l. per fm. The 242, west of old sump, is worth 25l. per fm. The 230, east of new east, is worth 35l. per fm.—North Central Lode: The 20, west of cross-cut, north of Rule's shaft, is unproductive. In the south part of the mine we have cleared the adit to the end, which is about 70 fms. to the west of Plantation shaft; we are now driving south in search of the lode.

**EAST CADDO.**—Wm. Secombe, April 13: Counter Lode: The 50 east is worth 20l. per fm.; the 60 east, 10l.; the 70 east, 5l.; the 80 east, 15l.; and the 80 west, 30l. per fathom.—New Lode: The 60 east is worth 8l. per fm.; and the 70 east, 5l. per fm.—South Lode: The 70 east is worth 10l. per fm.; and the 70 west, 45l. per fm.

**EAST CARN BREA.**—T. Glanville, J. Scholar, April 13: Tutwork Setting: The old engine-shaft to sink below the 70, by six men, at 30l. per fathom. Thomas's engine-shaft to sink below the 26, by nine men, at 16l. per fathom. The 70 cross-cut to drive south of the old engine-shaft, by six men, at 7l. per fathom. The 70 to drive west on middle lode, by two men, at 4l. per fathom. The 60 to drive west, on south lode, by four men, at 7l. per fathom. The 60 to drive east, on south lode, by four men, at 6l. per fathom. The 50 to drive east, on north lode, by four men, at 7l. per fathom. The 50 to drive east, on the branch, by two men, at 5l. per fathom. The 50 to drive east, on the new south lode, by two men, at 5l. per fathom. The 50 to drive west, on new south lode, by four men, at 5l. 10s. per fathom. The 50 to drive east and west on the last lode cut in the cross-cut, by four men, at 3l. per fathom. The 40 to drive east on the south lode, by four men, at 6l. per fathom. The winze to sink below the 40, on the south lode, by two men, at 6l. per fathom. The 26 to drive east, on south lode, by two men, at 4l. 10s. per fathom. In the 60, driving east of the cross-course, the south lode is producing 2 tons of ore per fathom. The 60, west of the cross-course, is producing 4 tons of ore per fathom. The slopes in the back of the 60 are producing 7 tons of ore per fathom. In the 50 east, on new south lode, the lode is producing 1 ton of ore per fathom. In the 50 west no lode has been taken down for the past week. We have commenced to drive east and west on the last lode cut in the 50 cross-cut, which is 2 ft. wide, composed of spar, tin, and copper ores, yielding of the latter 2 tons per fathom; we shall be able to report more fully of its value in a few days after the samples are assayed for tin. I have this moment received the tin sample, just in time for post; the lode will produce 5 tons of the same quality stuff as the assay.

**EAST CLOGAU (Gold).**—K. Roberts, April 12: The surficial quartz in No. 2 St. James's level holds out well. Next month, if all is well, I intend to examine for the best spot to sink on the lode, so as we may see the nature of it at a more certain depth. Driving eastward of St. John's cross-cut the ground is much the same for exploring. I have confidence when we cut into St. James's lode of meeting with a good improvement, as the ground at present denotes that we are not very far from it.—St. Dewi No. 1 Level: Here we are looking a shade better; and the lode appears to be opening out in both size and character.

**EAST DAREN.**—J. Garand, April 12: Taylor's shaft: The 116 east is now clear of stuff, and we shall resume its driving next week, which will be after our setting day. In the 104, east of the lode is from 2 to 3 feet wide, composed of clay-slate, carbonate of lime, and spots of lead ore, but not to value. In the slope over this level, west of cross-cut, the lode is from 4 to 5 feet wide, producing about 1 ton of lead ore per fathom. In the 92 east the lode is from 2 to 3 feet wide, composed of soft blue clay-slate, intermixed with carbonate of lime, but unproductive for lead ore. The branch going off south from the slope, 45 fathoms east of Taylor's shaft, still continues to look well, and yields about 1 1/2 ton of lead ore per fathom. In the winze sinking below this level, 45 fathoms west of shaft, the lode is become small, and is unproductive for lead ore at present. In the 80 east the lode is from 2 to 3 feet wide, principally composed of a dark blue clay-slate and carbonate of lime; unproductive for lead ore, being disordered by broken-up ground. In the winze sinking below this level, 65 fathoms east, the lode is composed of a dark blue clay-slate, blende, carbonate of lime, and lead ore, yielding of the latter 1 1/4 ton per fathom. In the 68 east the lode is from 4 to 5 feet wide, composed of a dark blue clay-slate, blende, carbonate of lime, and lead ore, yielding of the latter about 1 1/2 ton per fathom.—Reed's Shaft: In the slope over the 89 west the lode is from 3 to 4 feet wide, yielding from 10 to 12 cwts. of lead ore per fathom. In the cross-cut, south of the 68 west, the ground is hard for exploring. We do not see any indications of the lode as yet. The slopes and pitches throughout the different levels continue to yield their usual quantity of lead ore. Our machinery is in full operation, with plenty of water.

**EAST GREAT WORK.**—John Lean, April 14: The men are making good progress in sinking the engine-shaft; the ground is favourable. The branch spoken of in last report will be out of the shaft in sinking a few feet more. It continues to produce stones of copper ore.

**EAST GUNNIS LAKE AND SOUTH BEDFORD.**—J. Phillips, April 14: The men in Gard's shaft are making good progress, the bottom of the shaft is quite free of water, and we have a branch of ore on the hanging wall of the lode, worth 1 1/2 ton per fathom. In the rise progress is still impeded by water. There is no alteration in either the deep adit or the 12, east of Gard's shaft.

**EAST.**—J. Secombe, April 13: The western shaft is now down 3 1/2 fms. below the 26, the ground in which continues favourable. In the 26 south the part of the lode being carried (4 ft. wide) will yield 6 cwts. of lead per fm. In the 26 north we are still cross-cutting the lode, and are not yet through it. The rise in the back is up 6 fms.; the ground continues favourable, and the small part of lode carried is worth 3 cwts. of lead per fathom. The slope in back of the 26 will yield 10 cwts. of lead per fm. In the cross-cut driving west we have intersected a small branch, beyond which the ground looks very congenial for lead.

**EAST MARGARET.**—R. James, Wm. Williams, J. H. Birch, April 14: In the slope

in back of the 87, east of engine-shaft, the lode is worth 10l. per fm. In the 77 east the lode is worth 5l. per fm. In the 67 east the lode is worth 6l. per fm. In the 57 east the lode is worth 7l. per fm. In No. 1 slope, in back of the 57 east, the lode is worth 6l. per fathom. No. 2 slope is worth 6l. per fm. In the 47 east the lode is poor. In the winze in bottom of the 47 east the lode is worth 6l. per fm. In the 27, west of Pool's, the lode is producing tinstuff of low quality. At the new shaft, 10 fms. below the surface, the lode is 3 ft. wide, of a very kindly appearance, and producing a little tin, but not enough to value.—Curgenving's Lode: In the 57, east of cross-cut, the lode is split at present, and cannot give it a value. In the 57, west of cross-cut, the lode is worth 6l. per fm. In the adit level, east of Curgenving's shaft, the lode is worth 4l. per fathom.—Tribute: 13 pitches are being worked by 26 men, at an average of 12s. in 11.

**EAST ROSEWARNE.**—J. James, April 14: We have commenced to sink Hallett's shaft below the 75, in which there is a good branch of ore 6 in. wide, worth 10l. per fathom for length of shaft, 10 feet. In the 75, east of Hallett's, the lode is 9 in. wide, opening tribute ground; the lode is set at 12s. 6d. in 11. In the 75 west the lode is 15 in. wide, worth 16l. per fm., exclusive of the south branch, which has not recently been taken down; the slope in back of this level is worth 10l. per fm. The 65, east of sump winze, has not been driven since last reported, the men are stopping the back. In consequence of our not intending to drive through the elvans at this level, we drive it only as it is required for stopping; the slope is worth at present 12l. per fm. In the 65, west of sump winze, the lode is 6 in. wide, unproductive in the end, but there are rich stones of ore in the bottom of the level, and the water flowing freely. This induces me to think that it is only a poor speck, to which the lode is sometimes subject. In consequence of an increase of water at King's shaft we have to suspend the sinking for a few days and put the men to get the rods to work; this water seems to be rising up from the bottom of the shaft, and is evidently near a great improvement in the lode. In the winze sinking below the 55, east of King's shaft, the lode is 18 in. wide, worth 26l. per fm. The slopes in back of the 55 are a little improved, worth at one point 20l. per fm.

**EAST TREKERRY.**—J. Manarrow, April 12: The 12 west is worth 4l. per fm. The slope in the back of the 12, west of shaft, is worth 18l. per fathom. We have cleared the east shaft to the bottom, which is 3 fms. below the 12, where there is a good tinny lode, and a level driven east and west, which we are now clearing.

**EAST WHEAL ELLEN.**—R. Fryor, J. Garland, T. Corfield, April 8: The deep adit level to drive east of the new shaft, by three men and three boys, at 4l. 10s. per fathom, in a lode full 4 ft. wide, composed of mundle, peach, and spar, with good stones of copper ore; this end is letting out a quantity of water, and has within the last 6 ft. undergone a most favourable change. No. 1 slope, in the back of this level, by four men and one boy, at 2l. 15s. per fathom; lode worth for copper ore 3 tons per fathom. No. 2, in the back of ditto, by two men and two boys, at 2l. 10s. per fathom, worth 2 tons per fathom. No. 3, in back of ditto, by two men and two boys, at 2l. 5s. per fathom, worth 2 tons per fathom. No. 4 slope, in the back of ditto, by two men and two boys, at 2l. 10s. per fathom; lode 3 ft. wide, and worth 2 tons per fathom. This slope is about 35 fathoms west of No. 1, thus showing that we have full this number of fathoms of ore ground already laid open, which is all in whole ground to surface. The deep adit level to drive east of cross-cut, on the north lode, by two men and two boys, at 5l. per fathom; lode 1 ft. wide, producing stones of ore. We are getting on well with the dressing, and shall sample on Tuesday next about 60 tons of ore. Our pay and setting went off well.

**EAST WHEAL FORTUNE.**—R. Roberts, April 13: The adit cross-cut is now within 5 fms. of the south lode, and, as the ground is a little easier for driving, we expect to cut it this month.

**EAST WHEAL GRENVILLE.**—G. R. Odgers, Wm. Bennett, April 13: There has been no lode taken down in the shaft since our last report. The lode in the 65 east is from 2 1/2 to 3 ft. wide, yielding splendid work for tin, with some good ore, worth full 10l. per fm. The lode in the 65 west is 18 in. wide, of quartz and prlan, yielding a little tin. The lode in the 35 east is small, and we have placed the men to strip down the north side. We are making good progress with the rise and shaft, and which we expect will be holed in about one month or five weeks. The slopes above the 45 east are worth 10l. per fm. The slopes above the 45 west are worth from 6l. to 8l. per fm. The slopes below the 35 east are yielding about 8l. to 10l. per fm. North Lode: The lode in the 65 east is 18 in. wide, yielding about 1 1/2 ton of lead ore per fm. The lode in the 45 east is 15 in. wide, worth 1 1/2 ton of lead ore per fm. The lode in the 45 west is 18 in. wide, yielding ore, with mundle, &c.

**EAST WHEAL LOVELL.**—J. Burjan, April 14: Since my last report this mine has considerably improved. The shaft sinking below the 20 is worth 120l. per fm., and the appearance and size of the lode most encouraging. The 20, on the north lode, referred to last week, is opening up a course of tin worth 150l. per fm.; this is a lode which has fallen in from the north, forming a junction with our rich north lode, and shortly we propose to sink on the junction of these lodes, where the course of tin appears to be 9 ft. wide. The slopes in back of the 20 are worth over 100l. per fm. On the south lode, in the new winze sinking below the 20, west of Peter's shaft, the lode is 4 1/2 feet wide, worth full 80l. per fm. for the length of the winze, 9 feet long. On Saturday last we sold 9 tons 16 cwts. 0 qr. 12 lbs. of tin, for 629l., and have raised already since the last account between 20 and 30 tons of tin, with good prospects of increasing the sales.

**EAST WHEAL RUSSELL.**—J. Goldsworthy, April 13: Homerham's shaftmen are making good progress in cutting ground for cistern, bearers, &c., in the 130. In the 130 east the lode is 3 ft. wide, composed of capel, quartz, prlan, mundle, and spots of yellow copper ore; the ground is not quite so favourable for progress as when last reported. In the 120, west of Maynard's cross-cut, the part of lode being carried is 9 ft. wide, composed of capel, iron, prlan, peach, mundle, and produces a little copper ore. The ground in Barrell's cross-cut driving north in the 120 east, and east of Vigar's cross-cut, is hard, and progress slow at present. Harvey's slope in back of the 120, east of Doldge's winze, is worth 13l. per fathom. The slope in back of the 120, west of Doldge's winze, has fallen off in value, now worth 12l. per fm. In Hooper's rise in back of the 77, on the north part of the lode, the lode is 2 1/2 ft. wide, composed of capel, quartz, prlan, black oxide and yellow copper ore, and produces 1 ton, or worth 6l. per fm. The lode in the rise in back of the 66, on the north part of the lode, is 1 ft. wide, unproductive. The lode in the 45 east is 3 ft. wide, composed of capel, quartz, mundle, &c. In the 68 cross-cut, driving north-west of Hiltchins's engine-shaft, the lode continues hard, and progress slow.

**EAST WHEAL TOLGUS.**—April 13: In the 34 fm. level, west of the engine-shaft, the lode is 10 inches wide, consisting of soft spar, mundle, and prlan. The lode in the 24, east of John's shaft, is 29 inches wide, composed of spar, peach, mundle, and ack. The ground in the 34 fm. level cross-cut south is much the same as for some time past, rather hard. The ground in the adit cross-cut, south of the new shaft, is easy for driving. In the adit level, east of the new shaft, the lode is 2 1/2 feet wide, consisting of spar, peach, mundle, and gossan—a strong lode. The lode in the adit level west is 2 feet wide, much the same in character and appearance as the lode in the east level.

**GABRE.**—Wm. Sandoe, April 13: In the winze sinking below the 20 the lode is worth 8 cwts. of lead ore per fm.; the ground continues very stiff. In the rise in back of the 4



composed of spar, mende, and peach; driving by four men, at 41. 10s. per fm.—North Lode: In the 90 east the lode is 1 foot wide, producing good stones of copper ore; driving by two men, at 41. 4s. per fm. In the winze sinking below this level the lode is 1 ft. wide, producing 1½ ton of copper ore per fm. sinking by four men, at 71. per fm.—P.S. We have sampled to-day 137 tons of tin-stuff.

**GREAT TREASURE CONSOLS.**—W. Richards, April 14: The lode in the 92, west of Hobbler's shaft, is 4 ft. wide, containing quartz, capel, oxide of iron, flookan, mende, and a little yellow copper ore. The lode in No. 1 slope, west of winze, in the back of the 92, is 2½ feet wide, and produces some good work for the floors. The lode in the No. 1 slope, east of winze, in the back of the 92, is 3 ft. wide, and yields at this time 41. worth of copper ore per fm. We have a nice little pile of ore already prepared, and more is being added thereto for sampling. I consider the prospects of the mine to be more cheering than for some time past.

**GREAT WHEEL BUSY.**—J. Edwards, J. Petherick, W. Trelease, April 9: There is no change to notice in the 140, east and west of Harvey's engine-shaft, since last reported. The lode in Offord's shaft, sinking below the 130, is 4½ ft. wide, worth 307. per fathom for tin and copper ore. The lode in the 130, east of said shaft, is 4½ ft. wide, worth from 251. to 301. per fm. for copper and tin. The lode in the winze sinking below the 130 is 4½ ft. wide, worth for copper and tin 501. per fm. The lode in the 130, west of Fielding's shaft, is 14 in. wide, producing a little tin, but not to value. The lode in the slope in the back of this level, east of Offord's shaft, is worth for copper and tin 351. per fm. In the 110, east of Matthew's shaft, the lode is 3 ft. wide, producing a little tin and copper, but not to value. The lode in the 70, east of said shaft, is 7½ ft. wide, worth about 121. per fm. for tin.

**GRYLLS CONSOLS.**—The pay and setting passed of well. There is nothing new to report in the mine this week, but everything continues to progress satisfactorily.

**GWYDYR PARK CONSOLS.**—W. Smyth, April 13: In Gwyn Lifford adit and we have cut a branch composed of nice-looking spar, mende, blende, and small spots of lead ore; it is about 15 ft. from the last branch we cut; the end is very wet at present. In gossan and the lode is small, but I expect it will soon open again; it is still keeping to the west—no regular course, when we sink, we sink in the course I expect an improvement. No lode has been taken down in Gwydyr slopes for the month. We are getting on very well with the dressing, as the weather is now fine.

**HALENEAGLE.**—J. Edwards, E. Richards, April 9: There is nothing new to notice in the underground operations since last reported. We have several men engaged making a test from Boscawen to this mine to bring water for condensing and dressing. We have commenced to build the steam-whim house. The water has gone down during the past week 2 ft. 6 in.

**HARWOOD.**—W. Vipond, April 8: The new rise from the level at Scar Head is opening out well, worth 1½ ton of ore per fathom—a good vein, and every indication of a further improvement. I never saw the vein so good before at the bottom of the limestone; this may be caused by the intersection. The slopes further back are about as last reported on.

**J. RACE.** April 11: The rise from the level is up about 9 ft. into the limestone, and we have had excellent ore in the vein so far. I have sent them now to drive west to hole to the end of drift to ventilate both rise and level. I have no doubt but we are close upon a rich mine again here. No. 1 slope is as last reported. No. 2 slope is not quite so good. We shall be ready to weigh off 12 tons of lead ore on the 20th; samples I send by train. The trough level is going on well.

**HAVAN.**—G. Jones, April 12: The pit in the 10 is completed, and I have put the men again to drive the 10 west; this is producing about 1 ton of lead ore per fm. I have also put six men to drive the 10 east; this end is composed of copper and lead ore, yielding of the latter about 1 ton per fm. and of the former from 2 to 3 cwt. per fm. The end driving west from the cross-cut north still continues to yield about 2 tons of lead ore per fm. The slopes over Seton's adit are not quite so good as they have been for some time past. No lode has been met with in the cross-cut south as yet. Our dressing operations are progressing satisfactorily, and the quantity of lead ore being now dressed is 20 tons.

**HAWKMOOR.**—J. Richards, April 12: The lode in the adit level, driving west, is 1½ ft. wide, composed of capel, quartz, mende, and spots of tin, and promising an improvement. The lode in the slope in the back of this level is producing some good work for tin.

**HINGTON DOWN CONSOLS.**—T. Richards, April 13: There is nothing new to advise you of this week, but from present appearances I think the 110 fathom level will improve again shortly.

**KELLY BRAY.**—G. Rowe, April 13: The lode in the 25, east from western shaft, is 2 ft. wide, of a very promising character, being composed of quartz, mende, and black oxide of copper to the amount of 1 ton per fathom. The lode in the 70, east from eastern shaft, is 1 ft. wide, much the same in character as previously reported on, producing peach, quartz, and mende. The ground in the 60 cross-cut north is highly mineralised, in which several small branches containing quartz and mende have been met with. The lode in the 40, east from the north adit, is still divided into a horse of killas; both north and south parts contain quartz, fluor-spar, mende, and impregnated with ore; we anticipate an improvement at this point after the drive is sufficiently extended to find those two branches unite.

**LADY BERTHA.**—Capt. Harpur and Metherell, April 11: In the 53 west we are still taking down the lode, which is about 4½ ft. wide, composed of mende, quartz, and ore, worth of the latter from 161. to 181. per fm. The lode in the same level east is carrying more mende than we have seen for some time past. All other parts of the mine present the same appearance as when we last reported.

**Captains Harpur and Metherell.** April 14: The lode in the 53 fm. level, west of shaft, is between 4 and 5 ft. wide, composed of peach, mende, quartz, iron, and ore, worth of the latter 4 tons, or 121. per fathom. In the 53 east the lode is about 2 ft. wide, consisting of mende, peach, and quartz, with occasional stones of ore. No lode has been taken down in the 41 east during the week; when last cut through it was carrying good stones of ore. In the 30 east we have no particular change to notice, the lode being at present small. The lode in the pitch in the back of this level is still looking pretty well, being about 2 feet wide, composed of ore, mende, and peach, worth of the former 4 tons, or 121. per fathom. The ground in the eastern engine-shaft, sinking below the 30 fm. level, is a shade easier for exploring than it has been. The tribute department presents much the same appearance as for some time past. We have just placed two men to drive north on the cross-course in the 10 fm. level, for the intersecting a lode seen in the adit; we expect to cut it in about 9 or 10 fms. driving. The ground is favourable.

**LADY ELEANOR.**—Thomas Pierce: Since the last meeting we have sunk 5½ yards in the 103 west from shaft. The north and south vein has taken a throw at the bottom of the pump, and we are now cutting through it to meet with the west end. The north and south vein is very strong, and is from 1 ft. 6 in. to 2 ft. wide, composed of clay, chert, and limestone tumblers; we are occasionally meeting with small lumps of ore. The working expenses of this mine do not exceed 201. per month.

**LANIYET.**—J. Tregay, April 9: The engine has been set to work, pumping from the south shaft, to-day. Sinking will now proceed vigorously.

**MAULIN.**—Tregay, April 9: Good progress is being made in cutting down the west shaft; now within 3 fms. of the bottom.—Old Mine: The water is in for the 50.—East Mine: At Combs's we are driving the adit level; nothing of importance cut yet, but we have numerous lodes here to intersect.

**MERLYN.**—W. Sandoe, April 13: The lode in the 20, north of shaft, continues just as when last reported on, worth 6 cwt. of lead ore per fm. The slope in back of this level is worth 8 cwt. of lead ore per fm. The slope in bottom of this level is not so ore as it has been, producing dressing work. I have put part of the men from this slope, at the Victoria shaft, to open on the east and west lode, which at present looks promising, and producing good stones of lead ore. We sampled, yesterday, about 6 tons of ore for the sale on Thursday next.

**MINERA UNION.**—W. T. Harris, April 14: Brabner's shaft, sinking below the 60, is progressing favourably, also the cross-cut from the 80 under the shaft; the same may be applied to all other parts of the mine.

**MOLLAND.**—T. Bennett, April 12: The lode in the 62 east maintains its size and character, a masterly lode, producing good stones of grey ore occasionally, and such indications, I am inclined to believe, will lead to something better at a deeper level. The slopes in back of the 42 east are producing 1¼ ton of ore per fathom. The slopes in the north part of the lode, in the back and bottom of the 32 east, are producing at present 1¼ ton of ore per fm. Two men from the slopes are engaged in repairing the 20 fm. level east from shaft to the ladder-road winze, which must be kept open. Our engine is working very well, and everything is in pretty good working order.

**MORRIS (Silver-lead).**—Jas. Roach, April 14: We have not yet intersected the great lode in deep cross-cut. Next week I will dial the whole, and send you plan of same, which will give a correct idea of the distance we have to drive to reach it. This lode will, no doubt, yield large quantities of lead ore; the matrix is good, and carbonate of barites, with which the lode is charged, in places 8 to 12 tons per fm., seldom fall to lead the mine to large deposits of galena or silver-lead ore.

**NAINGLES.**—J. Rowe, April 12: We have an improvement in the engine-shaft; on Thursday last the lode was worth 251. per fm. Since then we have sunk from 2 to 3 ft., and last night commenced to take down the lode; from what I could see of the lode to-day it is worth 401. per fm., and looking more promising. The slopes over the 96, east of shaft, are worth 251. per fm. for copper. The slopes west of shaft are worth 101. per fathom. The 96 end, driving west, is poor. The lode over the 56 is worth 301. per fm. We shall sell from 4 to 5 tons of tin to-morrow.

**NANTEOS.**—R. Williams, April 13: During the most of the past week the men engaged in sinking the shaft have been idle, in consequence of water from the heavy rains; but they have now resumed, and we may hope for some dry weather, and therewith good progress. The lode at the shaft has not changed since my last, producing some good stones of ore, and of a strong character. The lode in the adit and east is not so speedy for exploring as it was, but there are signs of improvement both in speed for driving and productiveness; at present it contains lead, blende, &c., but I think there is still a portion standing to the south, which point we shall proceed to prove at once, as it may be the better part.

**NANTY.**—April 12: The lode at the roadway level, going north of boundary, is 4 ft. wide, but soft and unproductive. The lode in the rise over this level, north of boundary, is 5 ft. wide, producing good stones of lead ore, and looking promising for further improvement. The four slopes over this level, north of boundary, are yielding on an average 13 cwt. of lead ore per fm. The lode in the 10, going north of boundary, is 3 ft. wide, containing spots of lead ore at times, but nothing of any importance as yet. The lode at the deep adit, going north, is 5 ft. wide, with a promising appearance, yielding good saving work. This point is being pushed on with full dispatch by six men. The slopes over the 10 deep adit level, three in number, are producing on an average 12 cwt. of lead ore per fm. The lode in the rise over the deep adit level, 50 fathoms from its entrance, is 3 ft. wide, producing pretty good saving work. The dressing, &c., with all other surface works, are progressing favourably.

**NANTY-YAGO.**—J. P. Roach, April 9: In the 30, west of engine-shaft, the lode is 6 ft. wide, still consisting of compact carbonate of lime, carrying small strings of blende and lead ore, yielding saving work for the dressing-floors; the ground is very stiff for driving, consequently our progress is slow; in the same level east the lode is yet disordered and split into branches, which contain cubes of lead ore, but not enough to value; the wall of the lode is getting better defined and more regular than we have before seen it, therefore we expect an early improvement. The lode in the winze sinking under the 20 west is 3 ft. wide, yielding ¼ ton of blende and about 7 cwt. of ore per fm. The winze sinking under the 10 west is not very productive at present. The slope in back of the 20, east of winze, east of shaft, is without change since last reported.

**NEW CROW HILL.**—W. Trelease, April 15: It was our measuring and setting-day on Saturday last, and the following are the particulars thereof:—The 55 end east measured 3 fms. 4 ft., and was re-set to six men, at 41. per fm., with 11. per ton for ore. The north part of the lode here has not been taken down for the last week, which is very hard, and has hitherto been found to be poor. Some of the south part has been shot down, which does not show anything like it did a few feet back, still it is carrying some good stones of ore, and is, in fact, a very strong looking lode. The eastern slopes in back of the 55 measured 10 fms. 4 in., and was re-set to four men, at 15s. per fm., with 30s. per ton for ore, and 2s. per ton for mende; stented 10 fms. or the month; lode here worth 4 cwt. of ore per fathom. A new slope was let to two miners and two labourers adjoining the last named, to extend 8 fms. east from same; stented 12 fms. or the month, at 12s. per fm., with 30s. per ton for ore, and 2s. per ton for mende; lode here in sight worth about 2 cwt. of ore per fm. The western slopes, in back of same level, measured 13 fathoms nearly, and was re-set to two miners and two labourers, at 15s. per fathom, with 30s. per ton for ore, and 2s. per ton for mende; stented 12 fms. or the month; the lode here is split up and poor, worth in places 2 cwt.

of ore per fm. The 45 end is now home over the western slopes, and I shall not for the present drive it further. I offered a rise in the back of this level to four men, but it refused in the survey at the price offered.

**NEW HENDRA.**—R. King, April 6: The lode in the adit level driving east is about 6 in. wide, producing good work both for tin and copper, with a great deal of water issuing from the end, and from the indications I have every reason to think we shall have a further improvement, as we are now just passing the brow of the hill, and getting into more settled ground. We have a large piece of untried ground before us which several well known productive lodes pass through. Steady perseverance in pushing ahead will, I have not the least doubt, well repay us for our outlay. We shall sell a small parcel of copper and tin ore before our next meeting.

**NEW PEMBROKE.**—F. Puckey, J. Puckey, April 11: During the past month we have extended the 45 east of the engine-shaft, on the north lode, about 4 fathoms; for this driving the lode will average 2 ft. wide, of a very promising character, composed of quartz and peach, and producing some very good work for tin. From samples assayed, the lode is worth 71. per fathom; cost for driving the end 31. 10s. In the same level, west of the cross-cut, the lode is 2½ ft. wide, producing about the same quality work for tin, and occasionally producing good stones of copper ore. In the 45 cross-cut, south of the engine-shaft, no more lode has been cut since last reported; is still favourable for driving. In the 30 east, on the north lode, the lode is disordered and unproductive; the water is still issuing very freely from this end. We have commenced sinking the engine-shaft below the 45 for bearers and cistern, and to fix the lift in this level, we expect to complete this work in about a fortnight, after which we shall sink the shaft with all possible speed to reach the 60 fm. level.

**NEW ROBEVARN.**—Edward George, William Mitchell, April 13: Bickford's shaft is sunk 3 fms. under the 67; lode 4½ ft. wide, producing a little tin, but not enough to value. The lode in the 67 west is 3 ft. wide, worth 91. per fm. The lode in the same level, east of Bickford's, is 2 ft. wide, producing good stones of copper ore, and looks likely to improve. The slope in back of the 67 east is worth 201. per fm. The slope in back of the 67 west is worth 121. per fm. The slope in back of the same level, further west, is worth 101. per fm. The rise in back of the 68 west is worth 181. per fm. The lode in the winze sinking under the 46, west of Bickford's, is 2½ ft. wide, worth 31. per fm. for tin and mende. The winze sinking below the 46, west of Phillips's, is small and unproductive.

**NEW TRELEIGH.**—S. Mitchell, April 13: The ground in the 90, west of Carr's engine-shaft, is improved for driving, and the men broke some good stones of ore from the lode towards the bottom of the end last night. The 80 west is also a little improved, both for driving and the yield of ore in the past few days. The ground in the 70, west of the cross-course, is easier for driving, and the lode producing good ore. There is no change in the cross-cut south at this level, and the lode is not reached as yet in the cross-cut in the 60, west of the heave. The lode in the 80, west of Good Fortune shaft, is presenting a much better appearance, and some good stones of copper were broken therefrom yesterday. In the 70, west of Symons's, the lode at this present time, worth 111. per fm. The winze sinking below the 50, west of Symons's, has a good appearance, and the ground moderate for sinking.

**NEW WHEEL MARTHA.**—H. Rickard, April 14: The ground by the side of the lode in the shaft, sinking below the 74 is just the same as last week. The lode in the 74 east is composed of spar, mende, and capel, with good stones of yellow copper ore, but not to value. In cross-cutting the lode in the 74 west we find it to be divided by a horse of killas; there is a large stream of water issuing from the end, which indicates the south part of the lode is not far off. The slopes in bottom of the 52 is yielding 6 tons of copper ore per fathom. The tribute department is looking well. The water is fine for our dressing operations, and we are making the best use of it.

**NORTH BASSET.**—J. Harvey, April 13: The lode in Grace's shaft presents a more promising appearance, composed of gossan, spar, prlan, and tin—saving work. In the 112, east of Grace's shaft, the lode is 2 ft. wide, producing stones of tin In the 112 west the lode is 2 ft. wide, worth 31. per fm. for tin. In the 102, west of Grace's shaft, the lode is 3 ft. wide, worth 71. per fm. for tin. In the rise in the back of the 102 the lode is worth 51. per fm. for tin. In the 102 west the south lode is 2 ft. wide, composed of spar, peach, and a little tin.

**NORTH BUTLER.**—R. Pryor, H. Harvey, April 9: The lode in the 100, east of engine-shaft, is still producing good stones of ore, but is spare for driving, in consequence of its letting out such a quantity of water. The ground in the cross-cut south at this level is much the same as last reported, but we have not yet cut the lode. We have just commenced to sink a winze below this level, where the lode is 18 in. wide, and for the first 2 ft. in sinking was worth from 81. to 101. per fm. for copper ore, since which it has been a little disordered by a slide under the same; we are glad to say it is again improving, and if the ore continues to dip east, which is now in the western part of winze, it will shortly resume its former value; this winze is quite drained by the 100, which is not driven so far east by 13 or 14 fms.; this we consider to be a good indication. The lode in the 80, west of cross-cut, is without change to notice since last reported on.

**NORTH CHIVERTON.**—J. Hampton, April 13: I do not see that the indications in our new engine-shaft can be better than we have seen in the old one. I believe we shall have at it very distant period. In sinking the eastern shaft from the 10 to the 20, where it is communicated, we have discovered a split of the main lode, producing good stones of lead, which mineral is superseding the blende, going down; at this point the two parts of the lode are converging together in their downward course, and will ultimately, in my opinion, be a very profitable lode for lead. The lode in the 20 has rather improved for blende, and as soon as the engine goes to work we shall be able to raise and dress pretty large quantities of it. Other places are looking much as usual. Branches and stones of lead and blende are found in various places. We are preparing to drop pitwork in the old and little sump-shaft, in addition to the new shaft, and the whole will be worked by flat-rods, &c., from the engine, all of which are being got ready as fast as possible. At least one shaft will be able to work on a lode of lead some fathoms long, and some cwt. to the fathom, very soon after we begin to pump out the water; and at another shaft operations will be commenced about the same time, on a very good lode of blende and lead, now under water. The engine-house is hastening towards completion, and the roof is preparing to go on it. In my last report, there was, somehow, an omission of a word. When speaking of the engine, it should have been stated—"is being" delivered on the mine.

**NORTH DEVON.**—J. Blaney, April 7: On Saturday the adit level was set to four men, at 51. 5s. per fm.; the lode is 1½ ft. wide, composed of spar, with strings of ore worth saving. The winze sinking below the adit is set to six men, at 31. 3s. per fm.; the lode about 2 ft. wide, yielding good ore, and improving very fast. The men from the 10 are still at surface, opening ground for the crusher. I expect to put them to rise on Monday next. The slope between the 10 and 20 is set to four men and one boy, 4 fms., at 31. 10s. per fm.; the lode continues to produce from 1¼ to 1½ ton per fm. A winze at sink below the 20 is set to five men and one boy, 3 fms., at 31. 6s. per fm., in a very valuable lode. The 30 is set to four men and one boy, 3 fms., at 31. 10s. per fm.; the lode here is very promising, and I am expecting to have ore in this level very soon. The carpenters are putting the wheel together. Eleven hands are engaged in the dressing department. The crusher will be ready to go to work very soon. A very fine stone of ore to Mr. Ward, of Threemast, &c., from the engine, all of which are being cut out as fast as possible. It weighs between 600 and 700 lbs.; it is pure, on mass, and came from the back of the 20, weighing about 30 cwt.

**NORTH LAXEY.**—R. Rowe, April 12: The men are proceeding with cutting the trip lode at the bottom of the 60, in the south end; the lode is about 2½ ft. wide, and as good for lead as we have had it in the engine-shaft. The new drawing-wheel, and other necessary work connected with it, is being pushed as fast as possible. We have 10 tons of lead ready.

**NORTH MINERA.**—J. Dunkin, April 13: Saturday last being our pay and setting-day everything passed off very satisfactorily, and the following bargains were set:—The eastern-shaft to nine men, at 201. per fathom, and a very kindly ground for bearing lead; the branch in the western end of the shaft is getting larger as we get down; now 1 ft. wide, producing good stones of a pure ore and lead. I have no doubt of meeting with good results in depth. The 25 to drive west, north of said shaft, to four men, at 71. per fathom; the lode in this end is producing stones of lead ore and blende. A winze to sink under the 15, west of the above shaft, to six men, at 101. per fm. There is a good leader of lead ore, and will produce 1¼ ton of lead ore per fathom.

**NORTH POOL.**—J. S. Phillips, J. Pope, April 11: The house for the 60-in. pumping-engine is rearing with all speed, and will be ready for the erection of the engine in about a fortnight, when it will be delivered from the foundry as fast as required by the engineers. The balance stand is also being built for receiving the balance pumping-beam. The tradesmen are preparing all the necessary appliances for pumping from both shafts, and are raising building stones and assisting the tradesmen. The engine-shaft is being sunk (as the water is lessening) for bearers and cistern for house lift of 60-in. engine. The adit level cross-cut, north from this shaft, is driving at 61. per fm., and water issues from the end as if a lode, or the change of stratum from killas to elvan, was nearly attained. The water from these operations is little more than sufficient for supplying the masons. The adit level is being continued west from Ballarat shaft at 61. 10s. per fm., in a most interesting gossanised and mineralised lode.

**NORTH SHEPHERDS.**—H. Bennett, April 12: Decline engine-shaft is sunk 1 fm. 5 ft. below the 15. We intend to sink 2 ft. deeper, after which we shall lose no time in fixing our lift, &c. The 15 cross-cut is driven 5 fathoms 3 ft. from engine-shaft in a good looking killas, and more water issuing from the cross-cut than ever before seen, and I believe we shall have an increase of water as we approach the lode. The lode in the adit is looking much better for some time past—14 to 18 in. wide.

**NORTH TRESKERRY.**—R. Pryor, J. Tregoney, T. Jenkin, April 14: The lode in Treider's shaft is looking a little better, and in the east end is still a good lode of ore; the sinking of this shaft will be completed to the 100 in about three weeks from this time. The lode in the 90, east of shaft, is much the same as when last reported on. The lode in the 77, east of ditto, is worth 81. per fm., and improving. Within the last week we have cut a lode in the 47 cross-cut north, which is 18 in. wide, and producing stones of ore, we may here remark that this lode is about 70 fms. north of the lode, and all in whole ground to surface. The 57 fathom level cross-cut is driving south of the old lode, in a beautiful channel of ground.—Caunter Lode: The 67 end, west of cross-cut, is worth 81. per fm., and the rise in back of this level 91. per fathom. The 67 end, west of cross-cut, is not quite so good as when last reported on, being a little disordered by a cross branch. All other bargains are without change to notice since our last report. Our last sale of tin-stuff, for one month, amounted to 1401.

**OKEL TOR.**—W. B. Colloom, W. Metherell, April 14: In the 80 east we are still driving by the side of the lode. From the change taking place in the end we expect the lode will soon become productive. In the 65 the ground in the end has improved for driving; there has been no lode taken down for some time, our object being to push on this end as fast as possible to get under the western winze from the 50. In the 50 the lode has been stripped down; it yielded about 4 tons of ore to the fathom. The lode in the present end has become smaller, but with every appearance of its soon improving again; the slopes in back of this level will average 4 tons of ore to the fathom. In Northy's winze the lode will yield 7 tons of ore to the fathom. In Toll's winze the lode is composed of copper ore, mende, a beautiful looking quartz, and prlan, altogether a splendid looking lode for 3 ft. wide. In the various pitches there has been no lode taken down for the month.

**FEEN-AV-DREA UNITED.**—W. Tregay, T. Delbridge, April 9: Sump: In the 130 east end the lode produces good stones of tin, and lets out much water. In the 130 west end the lode is poor. In the 120 east the lode is poor. In the 120 west end the lode is worth 51. per fathom. In the 110 west end the lode is worth 61. per fm. In the 100 east end the lode is poor. The 100 west end has improved in appearance, producing stones of tin. The 90 west, on engine lode, is poor. The 90 west, on Martin's lode, is worth 71. per fathom. The 90 west rise, on Martin's lode, is worth 71. per fm. The lode in the bottom of Cobler's shaft is worth 101. per fm. In the 80 east end the lode is worth 71. per fathom. The 68 east is worth 31. per fathom. The 68, west end of shaft, on Skimmer's and Martin's lode, is worth 301. per fathom. We sold on Tuesday to Mr. Garland 59 tons of arsenic and 2½ tons of tin.

**PENHALLS.**—W. Higgins, J. Nance, April 9: Engine-shaft: We have not yet cut the lode in this shaft, but are expecting from its appearance to do so daily; the same remark will apply to the 50 cross-cut north. In the level driving east of ditto the lode continues to be worth 81. per fathom. The lode in the slope below the 40, east of the sump-winze, is 18 in. wide, worth 81. per fathom. In the 30, driving east of shaft, the lode is poor.—Flat-rod shaft: The lode referred to in our last as having been intersected in the 30 cross-cut, north of the shaft, is a downright one, of about 2 ft. in width, with occasional stones of tin; this has, no doubt, heaved up the north lode, and will give us some little additional distance to drive before we reach it.—North Lode: The lode in the 20, west of the cross-cut, is divided into a horse of killas, and now worth 41. per fm.; we anticipate this will shortly die out, and the end again resume its former value. The

slope in back of this level has improved, now worth 101. per fathom. The lode in the 20, driving west, north of the heave, is worth 91. per fathom; and in this level, driving west, south of the gossan, 101. per fathom. The slopes in back of this level are worth 151. per fathom. In the slope below the 10, east of the winze, the lode is 18 in. wide, worth 91. per fathom. Our men are now riding below the 40 a shaft, situated about 22 fathoms north-east of our western one, and 6 fathoms from the old workings, which shall be cleared up with all dispatch.

**PENNANCE CONSOLS.**—H. Peters, April 13: We have set our engine to work, and it is working very well. I hope we shall soon get the water out of the shaft, and close it up, that we may see the lode. We have holed the shaft from surface to addit, to let the water down through the shaft to the adit level, that it may not overflow the ground. We are engaged clearing and repairing the adit level west of Rose's shaft, where we saw that rich lode of silver-lead. Since we have set the engine to work, we have more water to go through the adit level, and it is not wide enough; we are obliged to open it wider. In sinking the new shaft close to the engine-house we have cut a lode, 18 in. wide. In the stones there is much carbonate of lead and some black copper.

**POLHIGGE MOOR.**—T. Bennett, April 13: The progress made in sinking the shaft has been somewhat slower during the past fortnight than previously, the granite being a little harder. The lode in the 20 end still maintains its promising character and size—20 in. to 2 feet wide, worth from 71. to 81. per fm. In the east end the tiny part of the lode is small, not over 6 in. wide, and quality not so good as last reported. We hope to effect a communication between the 10 and 20 west in a few days, which will better ventilate the mine, although not effectually until a further communication be made between the 10 and surface. This will be proceeded with forthwith.

**PRINCE OF WALES.**—W. Gifford, April 12: In driving the shallow adit we have met with the old workings on Drake Walls branches near our engine-shaft. I cannot say as yet how wide the workings are, as it is full of stuff, and there is not sufficient work done to prove whether we are above the bottom of these workings as yet. In the deep adit east, on Good Luck lode, we have met with a cross-course about 6 in. wide, composed principally of spar, with a deal of water coming from the north side of cross-course. No other alteration to notice.

**PROSPER UNITED.**—S. Lean, W. Millett, April 14: The lode in the 80, west of Louisa's shaft, is 2 ft. wide, worth 61. per fm. for tin. The ground in the north cross-cut at this level is very hard. The lode in No. 1 winze, sinking below the 70, is 2½ ft. wide, containing stones of tin. The lode in the 70 east, on the north part of the slope, is small and unproductive. The lode in the 70 west, on this part, will produce 2 tons of ore per fathom. The lode in the winze sinking below this level is 1 ft. wide, and unproductive. The lode in the 60 west, on this part, is 18 in. wide—poor. The lode in the 70, west of Hill's shaft, is in disordered ground. The lode in Hill's shaft, sinking below the 70, is 2 ft. wide, composed of spar and mende. The lode in the 70, east of Hill's shaft, is 3 ft. wide, containing stones of tin, but not sufficient to value.

**REDMOOR.**—T. Taylor, April 12: Our shaft is now about 13 fathoms deep, at which point I thought of driving east a few fathoms and cross-cutting; but owing to a change in the lode, which at present is yielding a deal of mende, flookan, prlan, &c., we have decided to sink a few feet deeper; the ground is good for sinking.

**REDNAL (British Copper Company).**—H. Phillips, April 13: During the past week we have made fair progress in clearing the debris, forking the water, and lowering the pitwork in the engine-shaft. The shaftmen are now engaged in dividing and clearing the shaft, and we shall again commence to lower the pump on Friday. The engine-house-whim work well. The weather has been very favourable for the buildings, which are in a forward state. I have the plans and dimensions of the buildings required for the new engine and crusher, and will get the tenders for its erection as soon as possible. On the whole, everything is progressing satisfactorily.

**ROARING WATER.**—Capt. Thomas, April 12: There is no material change in the ground in Giltman's shaft since I wrote last. In consequence of incurring too much expense in drawing water and stuff, I have suspended the sinking of Grady's shaft east of the horse-whim is erected. The lode in the shaft is a most promising one, and has every appearance of becoming valuable in depth. I have increased the number of men in the cross-cut, driving south, towards the new lode, with the view of intersecting it with a little delay as possible. I shall get the horse-whim put up on Grady's shaft, and hope to have it completed by the time the lode is cut. The extent of the bargains not being completed there is no change in the mine.

**ROSEWARNE UNITED.**—T. Richards, E. Carthew, April 14: The engine-shaft was set to sink on Friday below the 40, by nine men, at 101. per fm. The lode in the 40, east of the engine-shaft, contains stones of grey and black copper ore. The lode in the 40, east of the engine-shaft, is unproductive. The lode in the 30, west of engine-shaft, contains good stones of copper ore. The lode in the 20, east of engine-shaft, is 18 in. wide, composed chiefly of quartz and a little mende. The lode in the winze sinking below the 20 is worth for copper ore 41. per fm. On Friday last all our slopes were as on tribute, and are looking much the same as when last reported on.

**ROSLIFFE.**—J. Phillips, April 13: We have at length got through the crush in the adit, and can now see the lode, which it is stated there is a good branch of lead. The back over this place has been worked away by tributaries; the lode is an east-west one; it is about 3 ft. wide, and is composed of quartz, mende, jack, and lead. We shall now be able to clear up the Highburrow shaft as to get ventilation.

**ROSEWARNE CONSOLS.**—T. Uren, J. Berryman, April 13: During the past month the 70, east of Ellen's shaft, has been driven 2 fathoms, and is now driving by two men, at 25s. per fathom; lode worth 51. per fathom. The 60, east of Ellen's, has been driven 1 fm. 3 ft., and is now driving by two men, at 45s. per fathom; lode worth 111. per fathom. The 50, east of Ellen's, has been driven 2 fathoms, and is now driving by four men, at 55s. per fathom; lode worth 101. per fm., and likely to improve shortly. Ellen's shaft is sinking below the 70 by eight men, at 101. per fm.; lode 2 ft. wide, of a promising character. The 40, west of flat-rod shaft, on the eastern shaft, is driven by two men, at 35s. per fathom; lode poor. We have four pitches working on tribute by 16 men, at an average of 5s. 6d. in 11, and four pitches working by 10 men, at 10s. 6d. We put our new 12-inch pump to work last Saturday, which is working well.



and universally exercise a calming and sedative influence.







1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26



# GREAT SOUTH CHIVERTON SILVER-LEAD MINING COMPANY.

On the "Corn-moors" of Devon. In 6000 shares.  
BANKERS—Bank of London, Threadneedle-street.  
BROKERS—Mr. William Lisle, 11, Royal Exchange; and Mr. Emanuel Gompers, Crown-court, Threadneedle-street.  
SECRETARY—Mr. Henry Chapman.  
OFFICE, 11, ROYAL EXCHANGE, LONDON.

This company is formed for working the estate of Ventonings, in the parish of Perranzabuloe, in the county of Cornwall. It is bounded by the Chiverton Moor Mine to the north-west, and the rich West Chiverton to the north. Chiverton stands to the north-east, and South Chiverton to the south. The set extends eastward from Chiverton Moor Mine side by side of West Chiverton, for several hundred fathoms, as will be seen by the map (see Supplement of this day's Journal); therefore its position as a mining property is second to none in the county of Cornwall.

The accompanying reports of well-known and experienced mine managers acquainted with this district will be read with interest, and cannot fail to command publication. As before stated, the celebrated West Chiverton Mine, one of the best in Cornwall, its market value being £250,000, with every probability of its going much higher (about twelve months ago selling at £30,000), immediately adjoins this company's grant; and from the fact that the lodes in Great South Chiverton are in precisely the same position as the lodes in Great South Chiverton, similar large deposits of rich silver-lead ore are almost certain to be met with, and cannot fail, when properly developed, to make a great and lasting dividend mine.

## REPORTS.

Jan. 14.—This set is situated in the Chiverton district, in the parish of Perranzabuloe, in the county of Cornwall. It is upwards of 500 fathoms in length from east to west, and 400 fms. from north to south. It adjoins West Chiverton and Chiverton Moor Mines, the former extending the whole length of its northern boundary, and the latter the whole of the west and north-east, while West Chiverton and East Chiverton are situated immediately to the north-east, and North Chiverton and other mines are a little further north. The stratum is a clay-slate, which prevails in all the productive mines in the neighbourhood, and from what is thrown up in draining appears to be highly congenial for the production of silver-lead, and of precisely the same character as that in which the lodes are now so rich in West Chiverton. But here no sort of mining operation has hitherto been attempted; it is purely virgin ground, yet it is evident from appearances presented in draining, although very near the surface, that the backs of lodes having an east and west direction have been crossed; and streams of water issuing from the places where these appearances presented themselves, together with the fact that lodes have been seen westward running in this direction, serve to confirm this opinion, and to leave no doubt but that lodes could at once be laid open. These lodes are parallel with those now yielding such quantities of lead in West Chiverton, and will be intersected by at least one cross lode, seen to the north, and probably by others. The geological position of this ground resembles that of East Wheal Rose, which gave dividends to the amount of £28,000, and is certainly all that can be desired for the production of lead, and its relation to the neighbouring mines is such that when developed it can hardly fail to prove very valuable. Here, then, is a fine extensive set, in the richest lead district in Cornwall, and adjoining the richest mine in that district, equally as well situated, and likely to be equally productive; and from my long experience in the district, and from observations made when connected with the East Wheal Rose and other neighbouring mines, on the character of lead deposits, and the position in which they are found, I consider this a speculation of the very first order, and think it will prove highly remunerative. I have, therefore, the greatest confidence in recommending it.

JNO. NANCARROW.

Jan. 14, 1864.—I have known this ground for 20 years, and was engaged in what is now called Chiverton Moor with the lodes which they worked, and know of lodes in the south part of Chiverton Moor which must run through the entire length of this set, parallel with West Chiverton lodes, and in the same mineralised strata. This ground is situated in a pretty fall, similar to that of Old Shepherds and East Wheal Rose before laid open. The water rising from the backs of these lodes was much the same as the water rising from the backs of the lodes in this set at Great South Chiverton. I have been engaged in several lead mines in this district for many years, chiefly Wheal Golden and East Wheal Rose, and had the advantage of knowing nearly all the lead mines in the district; and knowing how the ground is situated where the ore has been found in those rich lead mines, I have no doubt a good mine will be found here. This ground is south of West Chiverton, the rich lead mine, and south of Chiverton Moor, and lodes both mines it is about 500 fms. long, and 400 fms. wide, and it is my opinion that when laid open it will be one of the great prizes of the district.

MARTIN GEORGE.

Prospect-place, Redruth, Feb. 24, 1864.—I have, in accordance with your request, examined the set called Great South Chiverton, and I now beg to lay before you some general remarks relative to its apparent mining capabilities. As you will perceive, my observations must necessarily assume a general character, from the fact that the ground has not up to the present time been tested as a field for mining enterprise. The set is situated in the parish of Perranzabuloe, and forms the southern boundary of West Chiverton; it extends from east to west somewhat between 500 and 600 fms., and from south to north about 400 fms. As far as I could ascertain, no lodes have up to the present time been laid open, but I perceived indications amongst the stones thrown up in the formation of a surface drain, which would lead me to suppose that some of them had been detached from a mineral vein, and it has been ascertained that a large lode, seen in an adjoining mine, must pass through this set; in fact, this district abounds in mineral lodes, and there is every probability that many may be found traversing this property. The stratum is similar to that of the adjoining West Chiverton, whose rich lodes encourage the belief that mining operations would be attended with considerable success in this particular direction.

W. H. REYNOLDS.

Perran Porth, March 8, 1864.—I have examined this set twice or thrice, and find it situated in the estate called Ventonings, and immediately to the south of West Chiverton and Chiverton Moor, on parallel lodes, and on which little has been done by way of trial; but from what I saw, and believing that an elvan course runs through the ground, I think it well deserving a spirited development. Little need be said about the district, it being the richest lead ever discovered in the West of England; and considering the proximity of this to the Chiverton Mines, I think it sufficient to inspire great confidence in the undertaking.

J. HAMPTON.

March 14, 1864.—Since my first visit to this mine rapid progress has been made. There are four lodes seen, three of which are parallel with West Chiverton lodes. The north lode is 2 ft. wide, the middle or centre lode is from 3 to 4 ft. wide, the south lode is 1½ ft. wide; these lodes are about 30 fms. apart, and carry a fine flooken, with a fine mineralised gossan. The fourth lode is a north and south lode, and crosses these lodes at right angles; this lode is 4 ft. wide, and looks well. These lodes are seen 9 ft. deep, and present a fine appearance, with water flowing freely from their backs; they are embedded in clay-slate, and cannot fail to yield large deposits of lead ore. This mine is side by side with West Chiverton and Chiverton Moor Mines. The geological position of this mine is everything that can be desired, and it is my opinion that it will not be second to any mine in the district when laid open. The men are busily engaged in bringing up a drain, and opening on the backs of these lodes. I think it cannot fail to open a good mine.

MARTIN GEORGE.

March 15, 1864.—This extensive set, in the parish of Perranzabuloe, includes all the estate called Lower Ventonings, except the small portion on the north, included in West Chiverton. We commenced operations here about three weeks ago, and our efforts have been eminently successful, for four lodes are already discovered, and we appear to have crossed another in a drain towards the north part of the set, but of this we cannot yet speak positively. Of the lodes discovered three run east and west, and one north and south, crossing all the others. The east and west lodes are parallel with the lodes of West Chiverton, are from the middle of the set northward, and are included in a width of about 60 fms. The north one of these appears to be about 2 feet wide, composed of gossan and flooken. The middle lode is from 3 to 4 ft. wide, also gossan and flooken, with a little mangle. The south one is a fine gossan lode, but we cannot yet determine its width. All these lodes look well, and the production of lead, and the strata, so far as our explorations have extended, is all that can be desired. The north and south lode, which is a strong one, intersecting all the others, is most favourable to lead deposits, and leaves no doubt but in the prosecution of these lodes a good mine will be opened up. The water being near the surface we have to bring up a drain from the north boundary, which will serve the twofold purpose of containing the ground, a drain for the present, and an adit for the future. This, and containing in other directions, is being pushed on as fast as possible.

JNO. NANCARROW.

March 31, 1864.—I have inspected the above property to-day, and now beg to hand you my report. I find it is situated south of the West Chiverton and Chiverton Moor Mines, and the lodes are parallel with the above mines. The boundary of the set, as pointed out by the captain on the mine, is upwards of half a mile in length, and about the same in breadth. They have already opened on the back of three east and west lodes, but not sufficiently deep to form any correct idea of their real value and character, and for the present they cannot open them deeper, in consequence of the water, but as the summer comes on they will no doubt be able to sink deeper, and to properly ascertain their size, and how much they underlie. They have also a caunter lode crossing the east and west lodes at an angle of 45°, on which they have sunk a shaft 6 fms., and the men are trying to sink it still deeper, but are entirely defeated by the water. This lode is also showing some good indications for the production of mineral. They have also a north and south lode running through about the centre of the set, and where, no doubt, large bunches of lead will be found in the east and west lodes, in conjunction with a north and south lode. To the south of the southernmost lode yet discovered there appears to be a large elvan course running nearly parallel with the east and west lodes, and from the fact of these lodes underlying south towards the elvan, in a moderate depth, form a junction with it; this also is a most favourable geological feature for the production of rich deposits of lead. They are now bringing up a lobby from the north boundary of the set, which will, I think, uncover the lodes that are already discovered from 7 to 8 fms. deep, and will, at the same time, lay open any other east and west lodes which have not yet been seen. They will have, perhaps, about 100 fms. to bring this lobby to cut the north and south lode, when they will be able to drive south on its course and intersect the east and west lodes already discovered, at a depth, as I have stated, of 7 to 8 fathoms. I expect this lobby will have to be brought up to the lodes even before they will be able to determine the right position of the permanent engine-shaft; therefore, every means should be adopted for pushing it on as fast as possible. The stratum, as far as I could judge to-day from the separate pits sunk, is a light coloured clay-slate, quite congenial for lead. This set being directly parallel with West Chiverton and Chiverton Moor Mines, I see no reason why it should not be found equally productive; of course, time and money must be had for its proper development, although I do not expect a very large amount will be required.

HENRY JAMES.

April 2, 1864.—In accordance with your request, I have carefully inspected the above mining property to-day, and beg to hand you my report. The set is extensive, being upwards of half a mile east and west on the line of the lodes, and about half a mile north and south, and joins the West Chiverton and Chiverton Moor sets to the south. There have been three east and west lodes laid open upon the backs by costaining and shallow sinking, shafts varying from 3½ to 6 fms. deep. The lodes above referred to have not been sufficiently laid open to enable me to give their size and underlay. The stratum which the lodes are embedded in is a light clay-slate, of the same description as its neighbours. There is also a north and south lode crossing the set, besides a caunter lode of great promise. There are two elvan courses running parallel with the lodes; the lodes and elvan courses are parallel to the West Chiverton and Chiverton Moor lodes. Taking the position of the Great South Chiverton set into account, with its rich neighbour, there is every reason for you to look forward to good results at a shallow depth. There can be but little further trial made as to proving the size and underlay of the lodes before the adit is brought in, which is in full operation, and taken up from the north boundary of the set. The adit to the south and east and west lodes, so far as opened upon, will leave a back of about 8 fms.; it will intersect two intermediate lodes, if not more, before intersecting the south lode before mentioned, and it can be driven upon a north and south lode for the greater part of the distance. The intersecting of the east and west lodes may, therefore, be regarded with more than usual expectation. Taking the position of the set in connection with its several lodes and elvans, there is more than an ordinary chance of early success, particularly at the junctions of the lodes and elvans, which is a pretty safe guide. The driving of the adit should be

forced on with the greatest possible speed; by doing so you will lay open the lodes, and enable you to decide where to sink your engine-shaft, &c. Of course, time and money are required in the development of new property as well as old, but I do not expect a large sum will be required here.

JOHN GOLDSWORTHY.

## SWANSEA COPPER ORE WHARVES.

Swansea, January 1, 1864.

GENTLEMEN.—We beg to inform you that, in consequence of the retirement of Messrs. W. and J. M. Williams from the copper ore trade, which they have carried on here for so many years past, we have resolved to enter upon that business, and for which purpose we have secured most eligible wharves, on the west side of the North Float, where vessels drawing 30 ft. of water can get alongside at all times. These wharves are now being covered in, and, together with a steam crusher now erecting, will, we expect, be completed in two or three weeks from this date.

The business we propose carrying on is that of copper ore wharfing, combined with metal and other general agencies, which will be managed by our Mr. Thomas Elford, who for 20 years has filled an important situation under Messrs. Williams, Foster, and Co., and for the last eight years has had the entire management of their large copper smelting works, and copper and metal rolling mills, in this locality, as well as the copper ore business of Messrs. W. and J. M. Williams, which we trust will be a sufficient guarantee to our friends that any business they may entrust to our care will be conducted with the most scrupulous attention to secure the best results for their interests. Soliciting a share of your consignments of ore, regulas, and slab copper to this port, as well as a share of any general business you may have to transact in this quarter,

We remain, Gentlemen, your obedient servants,

ELFORD, WILLIAMS, AND CO.

REFERENCES:—Messrs. Williams, Foster, and Co., London and Liverpool; Messrs. Williams, Harvey, and Co., London and Liverpool; the Glamorganshire Banking Company, Swansea; Messrs. Alex. Bell and Sons, No. 8, Finch-lane, London.

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## Notices to Correspondents.

SIR,—Can any reader give me information as to how I can obtain a correct statement of the amount of coal and iron raised and produced at any particular works?—BRUXEL.

YUDANANTARA.—In answer to the query of our correspondent, as to the reason why the ore of this company do not appear in the Swansea Ticketing, we learn, on enquiry, that the respective parcels, on arrival, are sold under reserve, which is not permitted at public ticketings, and by this arrangement a more uniform price is obtained. The whole of the ore already at Swansea, sold or awaiting sale, is about 550 tons, and averages 31½, 32½, and 34½ per cent.

## THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, APRIL 16, 1864.

When new mining regions are opened up, or old ones resuscitated, it becomes a matter of public importance to enquire into their merits; it is therefore that we again recur to the Wheal Vor tin mining district, which is giving fair promise at present of again taking the precedence of every other part of Cornwall in the production of tin, and the profits to be derived from this branch of mining. Cornwall has been from the earliest ages of historical record the source from which the principal part of the tin required by the world has been derived. The Phœnicians, the most commercial and enterprising nation of their day, visited the shores of Cornwall in quest of the much-valued metal more than 2000 years ago, and no doubt the streams and mines have been worked, to a greater or less extent, from that time to this; for as civilisation advanced the want of this desirable metal must have increased.

It strikes one as something wonderful that such a narrow strip of land as Cornwall, should not in such a long period have become completely exhausted of tin, but instead of this being the case the quantity has gone on increasing. Records of the annual quantity produced do not appear to have been kept before the year 1750, when it amounted to 2876 tons of block tin, or pure metal. In the last volume of "Mineral Statistics," issued by Mr. HUNT, Keeper of Mining Records at the Museum of Economic Geology—viz., that for the year 1862—we find the quantity produced in that year to be 14,127 tons of block tin or pure ore, yielding 8476 tons of block tin, or pure metal. These facts do not show any signs of exhaustion, but indicate that by exploring more extensively the yield may be increased to almost any extent, and this will, no doubt, be done, and the supply kept up suitable to the wants of successive generations.

The importance of the Wheal Vor district, relatively to the other parts of Cornwall, is shown by the fact that when explored by the one mine alone which gave it its celebrity, the Old Wheal Vor, this mine returned about 200 tons of block tin monthly, and it will, no doubt, appear strange, that whilst this enormous quantity of metal was being extracted from one solitary mining operation, an extensive field lay around almost completely unexplored, possessing precisely the same geological features, and the identical lodes, yet nothing further was done to develop it. Even at the present time there are only a few mines scattered at considerable intervals over this large tract, but in these results being met with are such as quite to bear out the character of the district established by the Old Wheal Vor. The Great Wheal Vor Company are working on the Wheal Metal lode, which is some distance south of the old mine, and are there opening out the greatest and richest tin mine of the present day. Great Wheal Fortune, still further south, has already discovered and worked on a course of tin, which was of great value, and the prospects continue good for future discoveries. Sithney Carnmeal, also in the southern portion of the district, is beginning to give signs of great productiveness.

Sithney Wheal Metal, which is on the Wheal Metal lode, is now being vigorously worked, and is likely to rival its rich neighbour on being thoroughly developed. There remains, however, the extensive tracts reaching from the ground occupied by the old Wheal Vor eastward to the granite hills forming the natural boundary of this district in that direction—a distance of about one mile. This ground is occupied by East Wheal Vor, in which a vigorous course of operations has just been commenced, and is the perfect counterpart of old Wheal Vor. The same deep bed of clay-slate in which such unequalled masses of tin have been found in the old mine; the same lodes, parallel and similar cross-courses, and the whole resting in the same great hollow of granite. This splendid mining field seems formed by Nature as a rich treasury of metal. The bold granite hills rise as boundaries on the east and west, forming a huge trough, which holds the killas rock, through which the numerous and rich lodes hold their course from one range of hills to the other, retaining their richness in metal throughout the killas, and deteriorating only on touching the granite. There are also identical elvan courses, cross-courses, and the other important geological features which form portions of the western half of this, as of all the other great mining fields of Cornwall.

It seems, therefore, almost beyond a doubt, that the working of East Wheal Vor will lead to one of the greatest successes ever met with in

Cornish mining; and there is every prospect at present, that instead of the few isolated efforts which are now being made to develop the unexplored parts of the Wheal Vor district, it will before long assume the appearance of the great group of mines which forms a girdle around the granite crags of Carn Brea, and looks like some large manufacturing town, composed of tall chimneys and engine-houses, in which the roar of the stamping mills and other machinery reverberates incessantly through the air, and the returns of metal amount to many hundreds of thousands of pounds sterling annually.

## THE CREDIT MOBILIER.

The extraordinary rage for companies which now prevails comes from the other side of the Channel after all. We have borrowed, although perhaps we should not like to admit it, half our financial ideas and schemes from the fertile French mind, which has been deeply occupied with *crédit* for the last 12 years. Thus the great *Crédit Mobilier*, which has been found so many more or less servile imitators in England in 1863 and 1864, was authorised by a decree of the President of the Republic, dated November 18, 1852, for a period of 99 years, dating from that day. Its operations may be divided under six salient heads:—1. It is authorised to subscribe to or acquire public effects, and shares, and obligations in various industrial and credit enterprises.—2. To issue, for a sum equal to that employed in its subscriptions and acquisitions, its own obligations.—3. To give or give as security for loans all effects, obligations, and shares acquired, and to exchange them against all other values.—4. To tender for all kinds of loans, and to cede them, and realise them, as well as all enterprises of public works.—5. To lend on public effects, on deposits of shares and obligations, and to open credits on running accounts, on deposits of the values.—6. To receive sums on running account, to effect all collections of funds on account of other companies, to pay their interest or dividends, coupons, and generally to make all other arrangements, and to maintain a deposit bank for all the securities of these enterprises. The profits realised are divided annually as follows:—5 per cent. is paid on the capital of the shares issued, 5 per cent. is applied to the reserve fund, and the remainder is divided in the proportion of 1-10th for the directors and 9-10ths for the shareholders. The reserve fund is composed of the accumulation of the sums produced by the deduction indicated, and where the reserve attains a total of 80,000, the deduction will cease. The society may be dissolved in case of the loss of the capital subscribed (2,400,000). The enterprises founded or patronised by the *Crédit Mobilier* are, among others:—the Austrian and Great Russian Railway Companies, the Spanish *Crédit Mobilier*, the Northern Spain Railway Company, the Cordova and Seville Railway Company, the canalisation of the Ebro, various Swiss railways, the Imperial Ottoman Bank, the Italian *Crédit Mobilier*, the Amsterdam General Society of Commerce and Industry, &c.; and in France the Parisian Company for Lighting and Heating by Gas, the Compagnie Immobilière (a great building speculation), the General Transatlantic Steam Navigation Company, the Paris General Omnibus Company, &c. The *Crédit* has also realised important financial operations on account of the persons, such as a loan concluded by the *Crédit Foncier* in 1852, the doubling of the capital of the Eastern of France Railway Company, the completion of the capital of the Dauphiné Railway Company, the payment of a balance of the last loan of the city of Paris, a loan of 400,000 contracted by the city of Marseilles, the Ottoman loan of 1863, &c. The *Crédit* has beyond all doubt communicated a powerful stimulus to the important branches of private and public enterprise.

At the annual meeting which will be held next week, it is expected a very flourishing budget will be presented to the proprietors. The last balance-sheet which has, however, been made public is that for 1862, when the administration claimed to have made a profit of 770,482, which, after the fulfilment of every statutory obligation, enabled a dividend of 54 p. share to be paid to the shareholders, or 25 per cent. on the capital subscribed. The 770,482 was made up as follows:—Interests and profits from investments, 714,496; profits derived from the placement of obligations and commissions, 51,969; profits of the *caisse des titres*, &c.; 362; balance brought forward from 1861, 3257. It is not always, however, that the *Crédit Mobilier* has been enabled to divide 25 per cent. in one year. Thus in 1853, when the flow of dividends first commenced, the distribution for the year was at the rate of 13 s. 8d. per cent.; in 1854, at the rate of 11 s. 16s. per cent.; in 1855, at the rate of 40 s. 14s. 9d. per cent.; in 1856, at the rate of 23 s. per cent.; in 1857, at the rate of 5 s. per cent. (that is merely statutory interest); in 1858, at the rate of 5 s. per cent. (that is merely statutory interest); in 1859, at the rate of 7 s. 10s. per cent.; in 1860, at the rate of 10 s. per cent.; in 1861, at the rate of 10 s. per cent.; in 1862, at the rate of 25 s. per cent. For 1863, as before observed, the dividend is not yet announced. It will be seen, however, that the dividends for the ten years ending Dec. 31, 1862, amount to 1417 s. 9d. per 100, and that at simple interest 917 s. 9d. per 100, or 100% of the original capital has been replaced after allowing for an annual distribution of 5 s. per cent. With compound interest there can be no doubt that the whole of the 2,400,000 of share capital has been more than redeemed, while the profits of profits still continues, and that copiously. So far so good. On the other hand, there must have been a good deal of jobbing in the shares, as the fluctuations in their value have been surprising, and the directors cannot be said to have made any effort to check these ups and downs by equalising the dividend. Thus, while at one period of 1854 the 20 s. shares went as low as 17 s. 4s., in 1855 they went up at one time to 66 s. In 1857 they again fell as low as 26 s. 16s.; and while at one point of 1859 they were only worth 20 s. 4s., in 1862 they went as high as 51 s. 8s. This is the fortunes are made and lost on the Paris Bourse.

MANUFACTURE OF STEEL.—Mr. A. L. Fleury, of Philadelphia, Pa., writes that the application of magnetism while steel is still liquid in the mould, causing the atoms to contract in the direction of the current, yielding lamellar steel, is a great improvement, and should command the attention of the greatest scientists, as Faraday and others. It seems to him that in this manner Wootz steel might be produced. The sample made by Mr. Gerhardt (whose process we shall publish next week) he declares to be of a very fine silvery texture and quite soft, equal to the best steels that he has ever seen.

INDIAN COAL.—A series of important experiments has been made by the officials of the East India Railway, North-West Provinces, with a view to ascertain the relative value of several kinds of Indian coal. The results were obtained with the Kurharbaal coal, which evaporated 57.14 of water per pound of coal; next comes the Nerbudda, 5.72; the Kargowlee, 4.95; the Barraka, 4.81; the Ranegowlee, 4.51; the Kargowlee, 4.29; and the Rajmehal, 2.14. The bad weather prevailing during the trial of the Kurharbaal coal was considered by Mr. P. D. Nicol, the locomotive superintendent, to be equal to 15 per cent. extra work. Mr. Blackwell, the managing agent of the Nerbudda Coal Company, says that the results of the trials of coal are highly satisfactory, taking all items, such as comparative speed and weight of trains, into account. The Nerbudda coal is, in his opinion, superior to any other tried, except the Kurharbaal coal. The apparent superiority of this coal he attributes to some of those accidents common to trials on a small scale, for he is satisfied that the Nerbudda coal, upon an average, is quite equal to the Kurharbaal field, or any other Indian district. The Barraka gets up steam very slowly, and with the Rajmehal coal the steam cannot be maintained.

NEW NAPHTHALINE FUEL.—DESTRUCTION OF FIRE-DAMP.—An improved and economic fuel has been patented by Mr. Arthur Wall, who has invented in connection with the neutralisation of fire-damp will be found in the recollection of our readers. The new fuel consists of a combination of hydrocarbon oils and other substances with small coal or slack, resin, or turpentine, or the refuse of these substances which are mixed with sawdust or shavings, the compound so obtained being mixed with coal dust, or slack; and when the whole is intimately mixed together it is compressed and rendered fit for use as a fuel. For steam purposes coal dust should be of the best quality; but for domestic use this is equally necessary. It seems that this production plays a prominent part in Mr. Wall's invention for the decomposition of fire-damp; in the prevention of explosions in coal mines, however, it plays a part only. The coke after the flame is exhausted that he uses for this purpose. He claimed that this improved coke burns smoke most effectually, and evolved steam at one-fifth the expense of coal. When its flame is exhausted it forms a coke that catches all the carbon carried about by hydrogen, burns the carbon and hydrogen at the same time; and, as long as the hydrogen is evolved from coal, it will not waste or get consumed itself.



pulley-wheel, while the iron cable is kept secure in its place by the grip of the iron levers, as in the former case. The iron-rods are considered to be a striking and important improvement on the usual heavy winding chains, and the catch, which is necessarily of considerable weight, being fastened to rods, prevents those accidents which can hardly fail to ensue when the catch and the rope together pass rapidly over the pulley-wheel. The apparatus is so constructed that it is always in working order, and seen to be so by the eye, and it is so simple, that it can be used by any one, and is so strong, that it can stand while the wet and heat of the shafts are liable to corrode and fasten the parts, and, perhaps, render them unfit for action on the very occasion when they may be required.

**NEW GAS APPARATUS.**—The specification of the patent of Messrs. Malm and Tice, recently filed by Mr. Henry, patent agent, Fleet-street, comprises arrangements for supplying railway carriages with compressed gas; an improved retort, or hydraulic main, adapted for use on shipboard, and some improvements in gasholders. The first of these also includes two spring regulators. The distinctive feature of the retort is the employment therein of a passage forming the sole communication between its interior and the ascension pipe, so that all the gas is caused to traverse the hottest part of the retort before escaping. The hydraulic main is constructed with recesses on its lower side to receive the ends of the dip-pipes, and retain the tar or impurities. A gasholder is provided, with a contrivance for steadying the float, and, in addition, an arrangement of adjustable valves. Another gasholder is specified, in which an expandable vessel is fitted in a close chamber, furnished with an escape-pipe.

## UTILISATION OF BLAST-FURNACE CINDERS.

In the *Journal* Sept. 26 last we published a communication from Mr. A. L. Fleury, of Philadelphia, describing a process which he had discovered of profitably treating the refuse cinders of puddling and reheating furnaces. Mr. Fleury observed that unslaked burnt lime has the peculiar property to decompose silicates during the act of hydration, or slaking, as it is commonly called. This can easily be demonstrated by pouring water slowly into an intimate mixture of sand and fresh-burnt lime—the outside of the sand grains will yield to the lime gelatinous silica, and when dried from with it a strong chemical combination, silicate of lime—the base of a good mortar. Taking advantage of this chemical fact, he mixed a proper percentage of powdered burnt lime with the cinders, and, after moistening the whole with water, exposed the mixture to the drying influence of the atmosphere. The dry compound was then used in a common puddling-furnace, and treated like pig-iron. He then obtained 50 per cent. of wrought-iron, which, however, retained still some traces of sulphur, leaving the iron somewhat red-short. To extract these last traces of sulphur, he dissolved in the water which he used for sisking the lime a small percentage of a chlorine salt, and his expectations were thoroughly realised. The process is also applicable to the working of the Bessemer process, and the iron formed in the puddling, cupola, or blast-furnace; it can also be worked to advantage in Bessemer's process. The lime and iron, or other similar furnaces. The preparation of the cinder, cost of lime, salt, &c., does not exceed \$2 per ton, and the result is, if properly worked, invariably a good quality of iron.

Referring to this statement, Professor Crace-Calvert, of Manchester, wrote that Mr. Fleury's process was not new. He stated that in 1854 he devoted much time to ascertaining the best methods of employing clinders from puddling and refining furnaces, so as to enable ironmasters to use them in larger proportions in their blast-furnaces without injury to the quality of the iron produced; and in August of the same year he took out a patent to carry out his views, which was identical with that of Mr. Fleury. His specification he stated—“The slag, or clinder, either before or after being calcined, or roasted, is ground into coarse powder, and mixed with half its weight of slaked lime, and made into a thick paste, which is formed into lumps, or bricks, with or without coal-stuff or charcoal, and is introduced, dried or calcined or not, into the blast-furnace, and used as usual.” Prof. Crace-Calvert also stated that this process was not practicable, owing to the enormous quantities of grinding the clinders, and afterwards mixing them with slaked lime, and making the whole into bricks, and, lastly, because the constant vibration which exists in blast-furnaces, owing to the working of the blast-engine, caused the bricks to fall into powder, and to interfere with the draught, and, consequently, to impede the working of the furnace. Therefore, he continues, in Sep. 1855—“I took out a second patent for fusing the clinders with about 20 per cent. of quick lime, 30 per cent. of slaked lime, or 50 per cent. of carbonate of lime, previously to using the clinders on the blast-furnace. This process I carried out with perfect success on the Continent and in South Wales. By this process the silica, sulphur, or phosphorus contained in the slag are retained by the lime, and pass away in the clinder of the blast-furnace, whilst the oxide of iron thus liberated is reduced with great facility to a metallic state. I am aware that clinder, or slag, and lime had been used in the blast-furnace for a long period; but my improvement consists in combining clinders and lime in proper proportions previously to placing them in the blast-furnace, thus securing the reduction of a large quantity of the slag, with its flux, when it comes in contact with the molten slag in the blast-furnace, and the escape of the impurities with the impurities with which it is united.” As to the use of chloride of sodium, Prof. Calvert refers Mr. Fleury to his patent of 1851 for the use of chloride of sodium as a means of removing sulphur either from iron ores or from coxes. The value of this process was fully tested on a practical scale at several ironworks, and also in a series of experiments conducted at various engineering establishments, with excellent results.

Now, although Mr. Fleury has as yet done nothing towards the development of his invention in this country, it seems that the process has worked well in the United States and that, consequently, Mr. Fleury could not permit even the smallest doubt to exist as to the originality of his invention. In reply to what Mr. Fleury regards as unduly severe strictures upon his communication, he observes that it is not to be wondered at that cinders mixed with slacked lime crumbled in the blast-furnace, and interfered with the draught; but it is somewhat to be wondered at that a professor of metallurgy should have thought of the propriety of Mr. Fleury's process, and so to do so without the specification of the patent in its practical workings, and so mistake it as to declare it "identical." The truth is, that not a particle of slaked lime is used in the process of Mr. Fleury. Mr. Fleury has long been conscious that slaked lime has no property of cohesiveness with the mixed compound of the cinder, notwithstanding it may have as a flux, with a molten mass. Prof. Crace-Calvert might well apply, in 1865, for a new patent, which he says he did, per consequence of the failure of his 1854 patent to answer the expectation of the inventor; and, although his new patent is a nearer approach to the patent of Mr. Fleury, yet it is vastly different in several very essential particulars. First, before stating the particulars, Mr. Fleury desires to observe that, if the process of Mr. Fleury is not to be taken for granted, it is different from 20 per cent. of quick lime, 30 per cent. of slaked lime, or 50 per cent. of carbonate of lime, was "carried out with perfect success on the Continent and in South Wales," the difference must be attributable, in the first division of that process, to the action of the quick lime, and in the latter division of that process to the action of carbonate of lime the components of the slag. The chemical action of 20 per cent. of quick lime and 30 per cent. of slaked lime on the silica contained in the slag, when in a state of fusion, is certainly very different to the chemical action of 50 per cent. of slaked lime, mixed with ground slag and water, sufficient to make them into a paste. And the chemical action of 50 per cent. of slaked lime on the silica of the slag, with ground slag and water, is also very different to 50 per cent. of slaked lime with ground slag and water sufficient to make them into a paste. And yet another and altogether different chemical action on the silica contained in the slag takes place when the slag is ground and mixed with caustic lime, together with sufficient water (in which has been dissolved some chlorine salt) to form the slag and lime into a paste. The hydration, or slaking, of the lime in close contact with the silica contained in the cinder gives rise to two distinct results. First, the heat produced during hydration and the alkaline reaction of the lime induces a partial gelatinisation of the silica, and forms a strong cementing substance—a silicate of soda. Secondly, the action of the alkali on the silica induces the formation of the peroxide contained in the slag, which is induced in such a manner that, in the state of the latter, and the chlorine salt, being intimately mixed with the whole mass, takes hold of the sulphur which clings to the iron, and prepares it for elimination in the furnace. Bricks or blocks made of this compound will not "fall into powder, and interfere with the draught" of the blast-engine, nor will they "impede the working of the furnace"—this latter is Mr. Fleury's process, which, it will be perceived, is not identical with any of the processes patented by Prof. Crace-Calvert. As to the chloride of sodium, Mr. Fleury remarks that this material has been used for the purification

There can be no doubt that the utilisation of blast-furnace slags is a subject of such importance to the iron trade, not only in this, but in every other country, that there should be ample room for two inventors, fortunate enough to discover the means of successfully operating upon them, to realise fortunes; yet we certainly cannot see any similarity whatever in the inventions of Prof. Crace-Calvert and Mr. Fleury, even assuming the composition of the two gentlemen's balls to be identical, since, by the invention of Mr. Fleury, at least one process is entirely saved, for he proposes to treat the balls at once in the puddling-furnace, whilst, according to Prof. Crace-Calvert's process, they would be introduced, dried or calcined or not, into the blast-furnace, so that whilst the one would obtain pig-iron only, the other would obtain it properly puddled so that, assuming the cost of crushing the cinder and mixing it with the flux to be the same in both cases, and, furthermore, it would follow, theoretically at least, that the process which produces wrought-iron from pig-iron is more economical than the production of only one-half the value of wrought-iron, and the only question to be decided was whether the cost of preparing the balls is not too high to admit of the application of the process at all, which Prof. Crace-Calvert negatives by his reference to his second invention.

GLASS SHEATHING FOR IRON SHIPS.—Her Majesty's iron ship, *Buffalo*, having returned to Deptford Dockyard after a three months' trip, has been inspected by divers for the examination of Leetch's preservative glass sheathing, applied to a portion of her bottom. The result was highly satisfactory, and appeared fully to realise the anticipation of the inventor, as the surface of the sheathing was then as free from any incumbrance as when first laid on.—*Times*. [We are informed that the attention of the Government was drawn to the desirability of using glass as a preservative for iron ships in 1853 or 1854, and that letters to that effect are in the hands of the Admiralty.]

**DISCHARGING COKE OVENS AND LOADING COKE WAGONS.**—To diminish the cost of these operations, and facilitate them by the partial substitution of steam power for hand labour, an invention has been patented by Mr. Alfred Jobson, of Darlington. The coke is drawn from the oven by a rake, and received upon a screen, which is then raised, and the contents slide off into the wagon, or into a truck, to be carried. The coke is thus drawn and packed in the railway-truck or elsewhere, as the case may be, with the least possible amount of breakage, its value at the place of delivery being thus considerably increased.

**NEW SAFETY-CAGE.**—Some two years since we described the very ingenious safety-cage invented by Mr. Joseph Kaye Hampshire, the engineer of the Whittington Collieries, near Chesterfield, and which is also applicable to every purpose for which hoists are used; we now learn that it continues to work as satisfactorily as ever. The simple principle of the lever upon which this apparatus depends is not only different, but far more effective than any previously introduced for this purpose; it acts instantaneously, of itself directly, and is independent of any other machinery, which might accidentally be out of order the very moment its services are required. The apparatus provides against all possible accidents that can arise from the breaking of the ropes or the overwinding, so that in the event of a rope being detached or separated from the cage four iron rods brought into immediate contact with the weight of the cage, aided by two strong springs, and instantly grip the conductors in four or six places, retaining the cage in the exact position in which it was left by the broken or disconnected rope. The levers work in a box, and are kept in gauge by a rod, and while the cage is in ordinary work are confined by four stops rivetted on lever-plates. The spring, which is a powerful six-plated spring, not only acts upon the levers, but also takes off the weight of the chain or straps from the rope when taking hold of the weight from the shaft bottom, and releases it again. We have here a spring generally used for this purpose, and which is perfectly adapted to the purpose. The disconnecting catch consists simply of two strong pieces of iron placed together on the principle of the plyers, it is fastened to the iron rods by which the cage is suspended, and when by over-winding brought into contact with the pulley frame immediately opens. The rope is instantly detached, and passes harmlessly over the

## REPORT ON CORNWALL AND DEVONSHIRE.

[FROM OUR TRURO CORRESPONDENT.]

APRIL 14.—In a direct line the distance from East Wheal Rose to WEST CHIVERTON is between three and four miles, in a direction as nearly as possible due south-west. As the bearing of the Chiverton main lode is about  $17^{\circ}$  or  $18^{\circ}$  north of east magnetic (about  $39^{\circ}$  north of true east), it would pass, if it continued and kept that course, through the southern portion of Newlyn Downs, a little more than half a mile south of old Wheal Rose and East Rose Mines; so that the old east and west lodes worked in Shepherds and Wheal Rose are parallel to the Chiverton lodes—the Wheal Rose lodes being about half a mile further north, and the Shepherds lodes about a mile further north.

The facts connected with the commencement of the present working of West Chiverton by the late Mr. Cookney, and its subsequent sale to the present proprietors, are so well known, and have been so frequently stated and commented upon in your columns, as to render it unnecessary for me to dwell upon them here, so that I shall merely confine myself to a description of the workings of the mine as they now stand. The main lode in this mine (Williams's lode), the bearing of which, as I have already stated, ranges from 15° to 20° north of east, underlies south about 2 feet per fathom. During its whole course it is a large lode—indeed unusually large for a Cornish lead lode—and where productive generally makes lead throughout, so that the greater proportion of the work raised here is much mixed with gangue matter, and requires some power in dressing machinery and appliances to return it. This lode has been opened on by two shafts 40 fathoms apart;—Hawkes's engine-shaft, which is sunk vertical from the surface to the 80 below adit (the adit is only 7 fms. deep at this shaft) crossing the lode at the 70; and Susanna's shaft, which is sunk to the 70 almost the whole way on the lode. Hawkes's shaft is 40 fms. west of Susanna's; and 65 fms. further west, Burgess's shaft is now down to the 40 below which it will be continued sinking to meet the levels coming west from Hawkes's. From the 40 there are levels at every 10 fms. Above the 40 the lode did not make much lead; below this, the level extended furthest east is the 50, which is driven about 55 fms. east of Susanna's and the level extended furthest west is the 70, which is driven 50 fathoms west of Hawkes's. So that below the 40, at which level the ore came in the extent of the workings at West Chiverton are not at present considerable, being less than 150 fms. in length at the most extreme points. Upwards, the 40 itself is driven nearly 160 fms. west of Hawkes's, and eastward the 20 is driven for some scores of fathoms.

Shallow, Williams's lode was characterised by a large sparry back. A little lead was discovered in the 8 fm. level, a short distance east of Susanna's; in the 40 there was a run of lead ground about this shaft for 30 fms. in length, and in the 50 this ore ground lengthened to 60 fms. Below the 50 the underlie of Williams's lode became more downright, and another lode went off south, which has been called Valpy's lode. Whether this latter is to be considered a distinct lode, or whether it is merely a south part of the main lode, is not very clear, for it makes a junction with the latter both east and west, forming, in fact, a large "horse" of ground between the two. In the 60 the junctions of the main lode with Valpy's are about 15 fathoms east of Susanna's shaft, and a fathom or so east of Hawkes's, showing the horse to have a length of about 52 fathoms at this level, with a maximum width of about 12 feet. In the 70 fathom level the lodes are rather further apart, the maximum width of the horse here being nearly 5 fms., and with this increase of width there is also increase of length, the points of junction at this level being at the bottom of Susanna's shaft and 15 fms. west of Hawkes's, showing a length of 55 fms. In the 80, as Valpy's lode has only been opened on about 25 fms., we do not yet know what its length may run, but as the lodes are closer together here and Valpy's seems to be again falling back to Williams's, the probability is that the horse will be rather shorter in this level. As I have said, the eastern junction of the two lodes in the 60 is 15 fms. east of Susanna's and in the 70 at the bottom of Susanna's shaft, so that in a depth of 10 fms. the junction has dipped 15 fms. west, and the western junction dips with a similar angle. As Valpy's lode has no existence beyond the 50 fms. comprised between these two junctions, of course the ore ground that makes upon it is dipping rapidly west with them; but below the 50 the ore ground on Williams's lode seems also to dip equally rapidly west, making the most lead, as it were, opposite the lead ground on Valpy's lode on the other side of the horse.

While Williams's is a very large lode, containing its lead scattered throughout, Valpy's lode is much more compact, making solid courses of galena, and the richest ore ground at present opening in West Chiverton is on this lode. Besides these two, however, a third lode, called Elizabeth's lode, has been opened on to the north of Williams's. In the 60 Elizabeth's lode is about 8 fms. north of Williams's, but in the 70 they are only about 4 fms. apart, and in the 80 about 2 fms. In character this lode is as distinct from the other two as they are from each other. It is by no means a great strong lode, like Williams's, nor does the lead form in compact masses, as in Valpy's, but it is a very good lode, and seems to make lead richer in silver than either of the others. Above the 60 it goes off flat to the distance between the two lodes in the 50 being nearly 20 fms.

It is well worth of notice that these three lodges—Williams's, in the middle, with Valpy's on the south, and Elizabeth on the north—seem all to be converging together in depth; in fact, from present indications it would appear as if they would all fall together about the next level—the 90. I the sump sunk under the 80 a branch of lead has been cut in the north end of the shaft. Until opened on it is, of course, difficult to say much about this; but the agents seem to think it may turn out to be another lode, again south of Elizabeth, which would evidently be a very important feature in the mine. In giving in some detail a description of the workings of this mine, which I purpose doing next week, I shall be able more fully to explain the important advantages derived from thus having three productive lodges workable within a few fathoms of each other; and, if another lode should be added to these three, West Chiverton will possess advantages rarely accorded to one mine.

It would be extremely unjust, in referring to West Chiverton, to pass without special reference over the name of Capt. James Juliff, the manager. Everyone knows the old Cornish saying that "a good bad makes a good captain;" and it is, doubtless, a true saying enough. But still it is equally true that a bad captain may spoil a good mine; and such an occurrence is by no means unknown. It is not easy to find a better instance of this than Old Chiverton, where, as I shall show, 100,000*l.* worth of lead ore was returned, at a loss of 40,000*l.* I do not mean to say that such a result would have been brought about at West Chiverton if Captain Juliff (or some equally competent person) had never seen the mine; but I can confidently say, and I think I shall be able to show, that if the mine had been managed on the narrow and confined scale usually carried out in the Perran district it would never have got beyond a third or fourth-class concern.

The miners of the district possess, no doubt, a large amount of valuable local knowledge, but they have hitherto shown themselves incapable of understanding how a mine should be opened out on a considerable scale, without which large returns and profits are impossible. Captain Juliff, on the contrary, was bred at Wheal Bassett, where he not only had the opportunity of seeing mining conducted on a very large scale, but had also the advantage of being trained and disciplined under the superintendence of Mr. William Richards—beyond all question the most judicious mine manager seen in Cornwall during the last 20 years. Mr. Richards, I believe, recommended Capt. Juliff to Mr. Cookney, and the recommendation has done honour to his judgment. When Capt. Juliff took the mine in hand it was in a very bad state of working—so bad that it required a good two years to put it into mining shape, and I thoroughly believe that its present



condition of prosperity is due, in a very great measure, to his mining ability. As I have been acquainted with the mine, and seen it at intervals, for the last four years, I am, probably, in a better position to give an opinion on this subject than any person not absolutely connected with the management.

#### REPORT FROM NORTHUMBERLAND AND DURHAM.

APRIL 14.—The Coal and Iron Trades continue good, on the whole, with excellent prospects for the summer, the demand both for coal and iron being well maintained. The prices received for both coal and iron are much better than during the last year, so that, allowing for the advance which has taken place in the price of most descriptions of labour, there is a little more encouragement in the prospect for iron and coal producers. The introduction of Hartley coal into the steam vessels of the British Navy cannot fail to improve the demand for this valuable steam coal; its real merits will, indeed, only now have a fair chance of being recognised, and a greatly increased demand may be expected for this kind of coal, as a most rapid increase in the number of steam vessels is taking place, and it is confidently believed that if this increase continues the demand for steam coal must very soon equal the supply. With the single exception of the strike at Seghill Colliery, the men are now on good terms with their employers at most of the collieries in the district, and the prospect for employment is certainly good, while the rate of wages is better now than at any former period. At Seghill, however, we regret to say, there appears to be no prospect of a termination of the strike. The effect on the inhabitants of the village and neighbourhood is, of course, most disastrous.

Mr. Dunn, the Government Inspector, attended at the Gateshead Police Court, on Friday, to prefer a charge against the owners of Sheriff Hill Colliery, with respect to the number of shafts at their colliery, and the arrangements in those shafts for lowering and raising the men employed. It appears there are two shafts at the colliery, but one of them cannot be used for lowering or raising men, there being no machinery erected for that purpose; the Inspector had asked upon the necessity of erecting this machinery, but without effect. Mr. Charlton, one of the owners, said he had some doubt as to whether it was necessary to have two shafts. The principal reason why they had not attended to the request of the Inspector was that they had no control over the second shaft; they expected, however, shortly to get leave to erect machinery in it, and when they did so they would put it in order. They were quite willing to refer the matter to arbitration, and ultimately this course was agreed to by both parties, so that the matter in dispute will be settled in that way.

An accident of a serious nature, though happily unattended with loss of life, occurred on Friday night last at the Margaret Pit, Newbottle Colliery, belonging to the Earl of Durham. For some months a number of men have been employed in driving a drift in the direction of some old workings; and, as it was well known that these workings would be filled with water or pent up gas, the utmost caution was necessary to ensure the safety of the workmen. The work progressed steadily, and about three months ago a bore-hole 15 yards in length made a communication with the old workings beyond; and, on the pressure being tried, it was found to be no less than 70 lbs. per square inch. The water and gas in immense quantity was gradually allowed to escape, until the pressure last week was reduced to 2 lbs. per inch. So satisfactory and regular had the diminution in pressure been that another and larger hole was put through, and men were also set on to reduce the thickness of coal with a view to opening out the place. Two men were at this work on Friday night, and were working about 9 yards further in than the commencement of the borehole, having 10 yards of coal in advance, when one of them stuck his pick into another bore which had not been holed, but had, nevertheless, been plugged up; a little gas had accumulated in the hole, and came out at some degree of pressure. The men suddenly became alarmed that they ran away, leaving their Davy lamps behind them; and it seems likely that one of the lamps was damaged in their hasty retreat, for they had not got more than 30 or 40 yards away when a slight explosion took place. The explosion did not hurt them, but the fire communicated with the two bore-holes already mentioned, and immediately set fire to the coal. The fire spread with alarming rapidity, and defied all efforts used to extinguish it; it was, therefore, determined to shut up and drown the district where the fire existed, and it is hoped the fire may be put out without having resort to more extreme measures. The Newbottle Pits are all connected with each other, and the occurrence of this accident has caused the working of the pits to be temporarily suspended, owing to the interruption in the ventilation; but steps are being taken to get them to work again as early as possible, the men in the meantime being provided with work at some of the other pits belonging to Lord Durham.

Messrs. Murray and Co., of the Chester-le-Street Engine-works, have just completed a horizontal portable engine for Mr. Coulson, to be used for sinking and pumping purposes at a colliery in Bohemia. The same firm has also just completed a 100-horse power engine for the Hibernia Coal Company, at Düsseldorf, in Rhenish Prussia.

#### REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

APRIL 14.—The Quarterly Meetings in connection with the Iron Trade of South Staffordshire have been held this week—yesterday at Wolverhampton and to-day at Birmingham. There has been a good attendance on each occasion, but the actual business done has not been large, for the orders given out have not been for large quantities. It is clear that buyers distrust the permanence of present prices, and hence are holding back in the hope of a reduction. The leading makers are, in a good many instances, well supplied with orders, but many of the smaller manufacturers are running short. Still, orders come in day by day, and the cases of works not in pretty full operation are few. There was, on the whole, to-day a disposition to feel confidence in the future, as everyone believes that the consumption of iron this year will be very large. Some, however, regret the last advance of 11, which sent up wages to their present high pitch; and, in point of fact, labour is scarce, and the prospect of a struggle with the men is not encouraging. It is worthy of note that the Miners' Association, at Willenhall, have ordered a levy of 1s. each member, to form an emigration fund, and a week's subscription realised 297. 10s. Pig-iron is not yet selling extensively, as large quantities remain for delivery. Best hot-blast, all mine pigs, are at 37. 7s. 6d., exceptional makes fetching 37. 10s. Inferior pigs are rather lower. Coal is easier in price, and for the first time for months it has been stated that a few miners are walking about in search of employment. The Hardware Trades are, on the whole, rather more active, the foreign trade showing an improving tendency.

A machine for facilitating the process of puddling has been in use for some three weeks by Messrs. Beard and Son, of the Regent Ironworks, near Bilston, and apparently with great success. Without a diagram a minute description would convey little idea of the nature of the invention, but it consists essentially of a vertical rotating shaft at the front of a puddling-furnace, which supports a movable horizontal plate, to which is attached a jib, which receives a variety of motions, which it imparts to the puddling rabble. The machine works only during the time the iron is in the boiling state, and the rolling up is done as at present, by hand. It is said that the puddling is more effectually done by this method, that a larger charge can be worked at once, and that the iron, by reason of the completeness with which every part of it is exposed to the action of the air whilst in a melted state, is more homogeneous than that puddled entirely by hand. It is also stated that a charge is sooner finished, and that, in consequence, less fuel is used. The invention differs from the previous attempts to effect the same result from the fact that it merely takes the place of the puddler's hand, whilst other inventions, as Mr. Walker's and Mr. Tooth's aim, at effecting the exposure of every part of the iron to the air by the rotating of the furnace, and the presence of projections or irregularities on its spherical internal surface. The inventor of the machine is Mr. John Griffiths, now manager to Mr. John Eastward and Sons, of the Railway Works, Derby, but formerly manager for Messrs. Beard, at the Regent Works, Bilston. The patent was dated June 26, and it was sealed Dec. 12, 1863. It is termed "an improvement in machinery for puddling iron and steel," and the number of the patent is 1612. Mr. Griffiths is a true friend to the class to which he belongs, and has given expression to that which all who know him will believe to be his real feeling in saying, that "if he thought his machine would injure the working man he would smash it up." Its application to a furnace will displace neither the forehead nor his underhand, for the apparatus is brought into play when the charge is melted, and it ceases to operate just when the iron has ceased to boil, and is dropping. At this point the forehead at once commences to bail-up. The apparatus can be worked by a small steam-engine, or by gearing from one used at the works, and the cost for such furnace is, it is said, about 15l.

A proposal brought forward by the most liberal and respected inhabitants of Hanley, in the Staffordshire Potteries, to adopt the Public Libraries and Museums Act in the town, with a view to the better support of the Hanley School of Art, and a Free News Room, has been defeated by an overwhelming majority, at a meeting where the education and argument were on one side, and numbers and loud unreasoning clamour on the other.

The discussion on the proposal to introduce the Factory Act with the half-time system in the Potteries appears to have led to an almost unanimous conviction that the system of employing children for half a day only, or on alternate days, with the obligation of attending school in the interval, is inapplicable to the district. A deputation of great local influence waited on Sir George Grey, on Monday, to represent the objections entertained, but the Right Hon. C. B. Adderley, Member for North Staffordshire, who accompanied them, is in favour of the half-time system.

At the Dudley Scientific, Art, and Industrial Exhibition, amongst the articles shown, a collection of carvings in South Staffordshire coal, and worked in various designs by a comparatively poor man, named Turner, of Dudley, excited much interest. A fine collection of delicate bronzes, belonging to Mr. Frederick Smith, is a prominent feature, and this case also contains three fine bronzes from Mr. W. Reddard. A very important feature in the exhibition was the series of specimens of iron, produced under the patent of Messrs. Jacob and Pretzenhammer, by Mr. Joseph Beasley, of Smethwick. The feature of interest respecting this iron is that specimens equal to the best charcoal iron are manufactured from the commonest pig-iron. He exhibits also specimens of artificially made magnetic oxides of iron, prepared by forcing steam over hot iron filings, turnings, and borings. Messrs. S. and E. Ransome's exhibition of Watson's patent differential pulley blocks, and the patent hand-truck; Messrs. May and Co.'s exhibition of Giffard's patent self-acting water injectors, for feeding steam-boilers; and Tange Brothers' hydraulic punch-

ing machines, are among the most interesting of the manufacture department. Models of Greville's gas-furnace, for melting cast-iron, specimens of Bessemer's steel, exhibited by Messrs. Lloyd and Porter, of Edgewood, is a most elaborate diagram, by Mr. C. Woodward, Birmingham; and a great number of other objects, some of major and others of minor importance, go to complete this department of the exhibition. The Geological Museum is, in its way, very complete, for what specimens one collection is deficient in are supplied by others. The fine collection of the Old Dudley Geological Society is displayed to great advantage. There is another feature in the exhibition worthy of special notice, and that is the production of artificial light from the combustion of magnesium. This was shown by Mr. Capewell, who produced a fine specimen of photography taken with the aid of this light. The mining and surveyors' instruments of Mr. Davis (Derby) include theodolites, levels, and anemometers. One specimen of the latter shows how very important these instruments are in mining, and how with them the exact ventilation of the mines can be correctly ascertained, and thus a degree of safety obtained in the working, which must be of the greatest value. Mr. Nichols, of the Coalbrookdale Company, exhibits some very delicate specimens of castings electrolytically, which show to what perfection the art of casting can be carried.

The Scientific Meeting in connection with this exhibition, on Tuesday evening, was presided over by the Right Hon. Lord Lyttelton. There was a numerous attendance of ladies and gentlemen: among those present were the Revs. G. H. L. Noot, J. H. Thompson, J. McGahern, M. Gibson, G. Lewis, W. Long (Vice-president of Sedgley College); Mr. S. Rudge (Mayor of Dudley); Prof. Beckett (Wolverhampton); Messrs. S. D. Feraday, J. Jones, T. Tinsley, M. Carrigg, E. Hollier, S. Willetts, H. Higgs, B. Eberhard, T. Collett, J. Finch, T. Brettell, T. Oates, S. Bowley, J. Huntress, J. Stokes, S. Solly, G. Jones, W. Bourne, J. Hollier, E. Fellows, E. Kelsey, W. Westwood, J. Aston, W. Wallis, (Walsall), W. Smith, C. Cockrane, S. Bastick, and many others. The Rev. W. Symonds, F.R.S., President of the Malvern Naturalists' Field Club, read a paper on "The progress of Geological Science during the past year." During his address, he pointed out how geological research had removed many fallacies, and especially had this been the case in consequence of the discoveries of the past year. The discoveries made of fossil fish in the old red sandstone was an instance of this. He afterwards alluded to the publication of Sir Charles Lyell's work on "The Antiquity of Man," and before concluding his remarks enforced as uncontrovertible the great principle of progress which was everywhere manifested, both in physics and metaphysics, and which was especially manifest to those who studied the science of geology. The Rev. gentleman resumed his seat amidst general cheering. Mr. Charles Moore, F.R.S., Bath, then delivered a lecture on "The Ancient History of the Earth." This was illustrated by 100,000 specimens and diagrams. During his observations, he said, with regard to the 100,000 specimens mentioned on the programme, they could not see many of them present, but he might tell them that organic remains were in many instances so minute, that 1,000,000 would lie upon a space not exceeding a square inch. (Laughter.) The lecturer produced the cases which contained his specimens, and amidst much laughter, showed how a very small box contained 60,000.

CONFERENCE ON PRACTICAL MINING.—On Wednesday evening a conference was held in the lecture-room, for the purpose of hearing a paper read by Mr. Rupert Kettle, "On the Working of the South Staffordshire Mines," and for discussing the best means of working such mines. There was a very large attendance, the room being crowded to excess, and the whole of the mine agents of the district, with one or two exceptions, were present. The chair was occupied by Mr. William Mathews. To mine agents, proprietors of collieries, and others whose interests are materially connected with the trade, the meeting was of great importance, and it is said that it was the largest assembly of mine agents yet known in the district. The Chairman, in opening the proceedings, after alluding to the subject of the paper, which would be heard before the opening of the coal season, he said that he hoped that the conference would be conducted in a fair and business-like manner, without regard to any feeling which might arise from conflicting interests. He then called upon Mr. Rupert Kettle to read the paper he had prepared upon practical mining. Mr. Kettle, who was cordially received, remarked that he had been requested to read a paper to the conference, probably in consequence of some remarks he had made at a recent meeting in Wolverhampton. He then went on to quote authorities respecting the actual quantity or specific gravity per acre of the thick or 10-yard coal in South Staffordshire, and to compare the estimated specific gravity with the quantity realised. In the course of his observations, he alluded to the custom of "long weight" and "short weight," as affecting to a certain extent the calculation of the weight of the coal. He also alluded to the fact that, after making all due allowances for slack, coal used in firing for boilers and pumping-engines, allowances to men, and waste, the return of coal actually realised was not so much as it ought to be if the data upon which the estimates were made were correct. After quoting statistics and authorities at great length, and alluding to the estimates made by Jukes from inspection and experiment in the Round Oak coal pits, two miles north of Dudley, and the Tivdale coal, one mile west of Dudley, Mr. Kettle went on to speak of the different modes of working the thick coal mines, the quantity of coal procured from the first, second, and third workings, pillar and stall working, and the long wall working. During his address, which lasted about an hour and a-half, he expressed himself as being of opinion that the "long wall" was the best and safest. He also suggested the necessity of having perfect ventilation in the mines, and the most complete control over the roof, and made some remarks upon the cause of fire in pits, alluding especially to the friction which might be caused amongst accumulations of coal dust by a "creek." This friction, he submitted for enquiry, might in some way, connected with the chemical action which would probably be going on in the accumulation referred to, produce a spontaneous combustion, which was known as "fire smell" in pits.

At the conclusion of Mr. Kettle's paper the Chairman briefly summed up the three heads which the learned gentleman had dilated upon—the discrepancy between the actual produce and the estimated quantity existing, which was a most difficult problem to solve; the effect of the "long wall" as compared with the "pillar and stall" working; and the speculation relative to spontaneous combustion. The Chairman having invited discussion, Mr. Henry Johnson rose and said that, after the very lengthy and elaborate paper the meeting had just heard read, containing as it did so many important topics for discussion, he thought that at that late hour it would be well to adjourn the meeting. They could not expect that evening to have so full a discussion as the subject deserved, and therefore he asked the Chairman to take the sense of the meeting upon the question of an adjournment. The Chairman agreed that the subject was one of too great importance to dispose of that evening, but he thought they might go on for another hour. Mr. Johnson (upon the suggestion of the Chairman) resumed. He contended that the fact of the discrepancy between the actual produce and the estimated quantity existing, which was a most difficult problem to solve, and the speculation relative to spontaneous combustion. The Chairman having invited discussion, Mr. Henry Johnson rose and said that, after the very lengthy and elaborate paper the meeting had just heard read, containing as it did so many important topics for discussion, he thought that at that late hour it would be well to adjourn the meeting. They could not expect that evening to have so full a discussion as the subject deserved, and therefore he asked the Chairman to take the sense of the meeting upon the question of an adjournment. 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their tests in the most successful manner, really deserving all the praise they got. The success of these two plates obtained for Pettin, Gaudet, and Co., an order from our Admiralty for plates to the value of about 3500*l.* sterling, half being of 4½ and the remainder 5½ inches. On the delivery of these at Portsmouth Yard they were at once sent to be of a very inferior manufacture to the "sample" plates, the successful test of which had procured the test laid down by the Admiralty in their contract, and the plates were re-shipped to France, with the exception of some three or four which had pieces of their metal cut out as samples for the Iron-plate Committee, and for which, therefore, the makers must be paid at their contract price, 45*l.* and 50*l.* per ton. The tests above mentioned will again raise the French standard.

**METALLIC ALLOY.**—An alloy, described as applicable to the manufacture of all metal articles, bells, hammers, anvils, rails, non-cutting tools, and other articles, has been patented by Mr. H. Micolon, of Paris. The alloy consists of iron, preferably in the form of waste or ribbons, or of tin and steel, with manganese and 4 parts borax; the proportions may be varied. When desired to increase the tenacity of the alloy, two or three parts of wolfram are added. When the cupola is ready to be poured in the iron and steel, the manganese, added. When the cupola is ready to be poured in the iron and steel, the manganese, added. When the cupola is ready to be poured in the iron and steel, the manganese, added.

### STANNARIES OF CORNWALL.

#### THE VICE-WARDEN'S EXPOSITION OF THE COST-BOOK SYSTEM.

A vast amount of highly important information bearing upon the constitution and management of cost-book partnerships was embodied in the judgment of the Vice-Warden of the Stannaries, given in the case of the West Tolvaaden Mining Company. The question raised was whether Mr. Richard Stone, of Derby (who contended that he held 500 of his shares as trustee for the company), should be settled on the list of contributors in respect of 550 shares, or of 50 shares only. The company originated in 1858 with a small party of two or three miners and a London broker, named Brunton. The mine is situated near the Land's End, and it was to be worked on the so-called Cost-book Principle, without any special rules or instrument of settlement; and was at the meeting in May, 1863, in London, declared to be divided into 5120 shares, of which Brunton at that time was the owner of the half. In December, 1859, a committee of management was appointed, after which the general or special meetings of the company are recorded with tolerable regularity, three or four times in each year, in one or the other of two cost-books; but from the beginning, in 1859, until August, 1861, no list or enumeration of shareholders is given in any of the cost-books of the company—a most important deviation from the legitimate practice of such companies, in which lists of shareholders are required to be kept for inspection, both of co-adventurers and creditors, and products of the company can be enforced by statute 18 Vic., cap. 32, sec. 22.

The committee of management is not necessarily incident to a cost-book mine company, though in large concerns it may be desirable; but no particular powers are usually conferred on them other than those which belong to any other manager of a mine on behalf of a mining company. It is the duty of such managers to superintend generally and to advise on the works, and they are competent to authorise such contracts of an ordinary kind as are essentially necessary for carrying on the work with effect. Extraordinary or unusual contracts, or arrangements involving a large outlay, ought to be reported to a general meeting for the sanction. They are also to submit to such meetings the reports of local agents on the mine, to state the financial condition of the company, and to propose such calls or dividends as the case may justify. The powers of these managers, whether shareholders or not, in such mine companies are not governed by fundamental regulations specially adopted by them, which may be at variance with the normal usage of cost-book companies within the Stannaries, are illustrated by many adjudged cases at common law.

In August, 1860, a set of written rules and regulations were introduced by the committee at a general meeting, and were said to have been read and approved thereof and circulated. Whether these rules were adopted by competent authority is open to question, for the majority of a meeting of shareholders are not usually competent to bind all the partners in a concern to submit to any change in the constitution of the company. The rules were circulated by printing them on the backs of circulars issued to shareholders, and it may be that the acquiescence of two years and upwards has confirmed any irregularity of this kind. In two respects these rules are at variance with the general practice of cost-book mines. They profess to make a mere majority of votes present at a meeting binding upon all shareholders, present or not, and they give a power to declare shares forfeited for non-payment of calls; a power quite different from the customary process of the Stannary Court for the sale of so many shares only as may be necessary to pay the calls. In other respects the rules do not seem to depart materially from the common practice of these local companies. The committee is to "manage the affairs of the company, subject to the directions and resolutions of general meetings."

This company had hitherto worked on a small scale, and the number of shareholders seem to have been small. The silence of the records and papers of the mine as to the number of shareholders for three years and a half is tolerably conclusive of this fact. In the latter part of 1860 the works on the mine became expensive, the calls were unproductive, and it became necessary to raise adequate funds.

It appears that at this period Mr. Richard Stone, of the Wardwick, Derby, having consented to purchase 500 of the shares held by Mr. Brunton at 4*l.* per share, and also to pay the calls due upon them—viz., another 4*l.* per share; the committee of management, on behalf of the West Tolvaaden Mining Company, in accepting the offer of the said Richard Stone, engaged to hold him harmless, and to pay back to him, on account of the said company, any loss which he may sustain by the sale of the said 500 shares, including the amount he may pay in calls, and also the amount due for interest at the rate of 5 per cent. annum. A bond to this effect was drawn and signed by the committee. Stone contended that at the same time he executed a formal declaration of trust, but there was no evidence of the fact, and the Vice-Warden did not, therefore, consider what its effect might be. The Vice-Warden observed—"The transaction, as set forth, seems to me a simple sale by A to B, at the instance of C, D, E, F, and in reliance upon their indemnity from loss in case of re-sale. The shares sold were the bona fide property of Brunton, from whom the company had been unable to extract the calls. From that time down to the present Stone's name is in every list of shareholders for 550 shares, except in one (June, 1862), where the blank column has been filled in with 50 in pencil over against his name. In my opinion, I am bound to settle Stone as a contributor for 550 shares, subject to a question which may hereafter arise when the rights of contributors come to be adjusted, *inter se*—viz., whether the managers who guaranteed him from loss in case of re-sale, and, equally, on, of their own pockets? To a certain extent he has been already indemnified by putting in suit the bond executed by them at the meeting in January, 1861." In order to throw the burden of this indemnity on the company, and to relieve both Stone and the managers, it was alleged that the transaction was sanctioned or ratified at the next general meeting of the company, but both Mr. Stone and the Chairman (Mr. Weston) admitted that no resolution of approval or disapproval was passed. The report of the meeting is a full one, and is signed, and seemingly corrected, by Weston, and it takes no notice whatever of either bond or trust, nor is there any mention made in it of the extraordinary terms of this sale to Stone, or of any act at all to him. Such a transaction would be natural, and would form the subject of a distinct resolution, yet no such resolution is recorded. The Vice-Warden's impression is that Weston and the rest of the managers thought the arrangement was one within their own discretion, and, therefore, executed the bond and concluded the bargain without thinking of ratification, or of reserving it for future submission to the shareholders; and he continues—"I am satisfied that this particular transaction was never either confirmed by, or even made known to, that meeting, or to any shareholders, except the parties immediately concerned in it; and I, therefore, think it unnecessary to consider what the effect of such confirmation would have been in binding all the absent and future shareholders in this company, which was a common law, unincorporated partnership, the members of which can only be made to contribute to liabilities incurred while they were such. It is not a case in which time and acquiescence would help to fix the present existing shareholders, seeing that the public books of the company convey no information or notice that could inform them of the contract made with Stone."

Since the day upon which the evidence alluded to was taken before the Registrar, Stone and Weston set up another objection. They now produce from the custody of Weston a written relinquishment found since September last, and alleged to have been delivered to Weston at the date of it—April 25, 1862. The Vice-Warden remarks that "a spontaneous relinquishment to the company of shares by one who professes to be only a trustee of the company seems not to be a very intelligible or consistent course; but I am not satisfied that there was any effectual relinquishment in point of fact. It is a question of fact rather than law. But if there had been an effectual relinquishment at the date of it, I do not see any objection to the insertion of Stone's name as a contributor to the extent of the shares so relinquished. In the case of an ordinary cost-book mine in Cornwall, a shareholder may cease to be a partner or member of the company by retirement, with certain formalities, subject to payment of past calls. The partnership is then dissolved as between him and his co-adventurers, and he ceases to be bound by their future contracts; but he continues liable on all contracts sanctioned by him on his authority, as well as to an account as between him and his late partners. His share of liability does not devolve on them, nor do they undertake to indemnify him against his fair share of such responsibility. He continues to be a person liable in law and equity to pay the debts of the company accruing during his ownership of the shares, and, therefore, liable to be put on the list of contributors under the Companies Act, 1862, under which both creditors and shareholders are, in effect, parties to the petition. This seems to be a short answer to the objection—A relinquishment would cut off a year of liability, and to that extent lighten his burden."

Other relinquishments are recorded, but that of Stone is not to be found in any book or file, or other record of the company, and the Vice-Warden observes that "such relinquishments are usually registered or filed by the pursuer, and are usually submitted to the next general meeting; but Dingle, the pursuer and secretary from 1861 to the present time, swears that no such relinquishment was ever received or seen by him, and that he never heard of it till the last affidavits of Stone and Weston. I will not say that the document is a fictitious one. I only say that no steps are taken to give effect to it as a genuine one, or to make it known to those whom it concerned to know it—the co-adventurers in the mine. Possibly, Weston knew that it would have been unavailing to attempt to use it, for it was a rule in this, as in most other mine companies, that a relinquishment is inoperative to release the shareholders from calls remaining unpaid on the shares so surrendered. Now, the last call made before April 25 (the date of the relinquishment) was then, and still remains, unpaid. The call of Feb., 1862: Stone excuses this by saying he was not told of this call, and he shows some late circulars with blanks left for arrears, which are usually notified in them, but he does not produce the circular for the call itself, which he must have received, for he has paid it to the extent of 50 shares, and only refused to pay more of it."

The Vice-Warden remarks that he has no doubt that the reason why Stone refused to pay more was, that when he found he had made a bad bargain, and that the calls were coming in upon him, he was dissatisfied with Weston, who then suggested the defence that the shares were not actually his, but only held in trust for the company, and that Weston then gave notice to Dingle, the pursuer, to demand no more calls on the 50 shares, but only on 50. And that was doubtless the reason why Stone refused to pay on the 500 shares, not only in respect of the calls made after the relinquishment, but also of the call on 500 shares made in Feb., 1862, before it. It appeared from a letter of Dingle, the pursuer, dated June 19, 1862, annexed to the affidavit of Stone, sworn on Feb. 8 last, that he had been induced to reduce the demand of payment solely on the

faith of the representation of Weston—that of the shares in Stone's name only 50 shares were actually his. "If this be right," says Dingle, "then please pay up your calls on 50." Weston, in his last affidavit (Dec. 30, 1863), stating the relinquishment, says he showed it to his colleagues in the committee on receipt of it, and, by their direction, he wrote to Dingle to make no more calls on Stone for the 500 shares, but no record of the fact is on any minute of the committee, and the Vice-Warden continues that he is persuaded that Dingle's remissness in not calling upon Stone for the full amount due from him on the several calls due in 1862 was against his own judgment, and in submission to the representation of Weston, who, of course, earnestly desired to relieve Stone, as well as himself and colleagues, from the consequences of the bad bargain which Stone had been induced to make.

In April, 1863, after the order to wind-up, a general meeting was called to consider, among other things, the affairs of these shares. Stone then explained his position as trustee of the company. The report (in the handwriting of Weston) then states a unanimous resolution that the official liquidator be recommended to treat the shares so held by Stone "as the property of the company." As to the relinquishment, no notice is taken of it either by Weston or Stone. Under these circumstances, the Vice-Warden considered that the fact of relinquishment had not been satisfactorily proved, and Mr. Stone's name was, consequently, retained on the list of contributors for the full amount.

**ACCOMMODATION BILLS.**—The case *ex parte* Barker, before the Lord Chancellor, on appeal from a decision of one of the Bankruptcy Commissioners, was where a young man had started as a trader with 500*l.*, of which 400*l.* was borrowed money (afterwards repaid), and in the course of two years became bankrupt through the failure of a large firm, who had prevailed on him to accept accommodation bills to the extent of 419*l.*, the Lord Chancellor affirmed the Commissioners' decision, refusing an order of discharge on the ground that the bankrupt had accepted the bills not having at the time any reasonable or probable expectation of being able to pay them. The Lord Chancellor said the bankrupt had been made the tool of others in the perpetration of a fraud on the public. This was one of those cases which had now become of such common occurrence in the commercial world, in which great frauds had been perpetrated by the reckless issue of accommodation bills. He could not look on conduct of this kind otherwise than as a concert between the parties to impose on the public; the bankrupt had undoubtedly induced the persons who gave credit to the bills by discounting them to give such credit on an implied representation that he could pay them at maturity, and this must be looked on as a misrepresentation, and a grave commercial offence—one of those offences which the Bankruptcy Act of 1861 was specially intended to meet.

### Crown Mineral Setts to Let.

LLANFACHRETH PARISH, MERIONETHSHIRE.

**THE COMMISSIONER OF WOODS, &c.**, in charge of HER MAJESTY'S LAND REVENUE IN WALES is PREPARED TO RECEIVE APPLICATIONS FOR A LEASE OR LEASES OF TWO MINERAL SETTS in the above parish, containing respectively 276 a. 1 k. 14 p. and 164 a. 3 k. 26 p., situate in the neighbourhood of the Cwmnwlus and Dwyffryn Mines.

Applications must be addressed, on or before the 20th of April, to the Hon. JAMES K. HOWARD, Office of Woods, &c., Whitehall-place, London, S.W., and each application must be accompanied by a remittance of 10*l.*, payable to Mr. W. C. HIGGINS, the Receiver General at the office.

### India Office.

**BY ORDER OF THE SECRETARY OF STATE FOR INDIA** IN COUNCIL, notice is hereby given that the DIRECTOR-GENERAL OF STORES FOR INDIA will be READY, on or before MONDAY, the 18th instant, to RECEIVE PROPOSALS in writing, sealed up, from such persons as may be willing to SUPPLY—

And that the conditions of the said contract may be had on application at the India Store Office, Cannon-row, Westminster, where the proposals are to be left any time before Two o'clock P.M. of the 18th day of April, 1864, after which hour no tender will be received.

India Office, April 4, 1864.

**SECRETARY-TO SOLICITORS AND PROMOTERS OF PUBLIC COMPANIES.**—A GENTLEMAN, fully qualified by birth and education, is DESIROUS OF OBTAINING AN APPOINTMENT AS SECRETARY TO A FIRST-CLASS COMPANY. The highest references can be given.—Address, "Z. A.," 8, Birch-lane, London, E.C.

**THE PROPRIETOR OF AN EXTENSIVE IRON PYRITES** MINE, who uses part of the ores for manufacturing sulphuric acid, WISHES TO ENTER INTO ARRANGEMENTS with other manufacturers, with a view to FURTHER UTILISE THE RESIDUES.—Letters (paid) to be addressed to Mr. ALBERT CHAMBER, Nuremberg, Bavaria.

**A NEW STEAM FUEL—SMALL COAL AND SLACK** UTILISED.—THE INVENTOR OF A NEW FUEL, in the production of which ANY QUANTITY OF SMALL COAL may be PROFITABLY UTILISED, and which, whether used for steam or domestic purposes, will be ONE-FIFTH THE COST OF COAL, and of THREE TIMES THE HEATING POWER, is PREPARED TO GRANT LICENSES TO THOSE DESIROUS OF USING THE INVENTION. Liberal terms will be offered.—Letters addressed Mr. A. WALL, MINING JOURNAL Office, will be forwarded.

**A GENTLEMAN, having a THOROUGH KNOWLEDGE OF** CHEMISTRY in its APPLICATIONS TO METALLURGY AND MANUFACTURES, WISHES FOR AN APPOINTMENT, in which the above requirements are AVAILABLE. He is also open to give advice to patentees and others on improvements in metallurgical and manufacturing processes, or the machinery connected therewith.—Address, "Chemist," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

**A GENTLEMAN, with good certificates from one of the best** Austrian Mining colleges, and a THOROUGH KNOWLEDGE OF SILVER ORES, and the VARIOUS MANIPULATIONS to which they are subjected, besides a great PRACTICAL EXPERIENCE IN ASSAYING, SMELTING, and SURVEYING, and all that belongs to mining in general, WISHES FOR AN APPOINTMENT.—Address, "Z.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

**A PRACTICAL MINING ENGINEER AND SURVEYOR,** age 38, is OPEN to an ENGAGEMENT, to UNDERTAKE, or RENDER ASSISTANCE IN, either UNDER or ABOVE GROUND SUPERVISION, SURVEYING, LEVELLING, MAPPING, &c. Salary not so much an object as permanent employment.—Apply to "N. D.," MINING JOURNAL Office, 26, Fleet-street, London.

**WANTED, a MINING CAPTAIN, to TAKE CHARGE OF** LEAD MINES situated in the SOUTH OF IRELAND. Parties wishing to apply should forward references and copies of testimonials as to their thorough knowledge of mining, and of dressing of ores, and should also understand drilling. They will likewise mention salary expected.—Applications to be addressed to Mr. J. P. O'REILLY, Secretary to General Mining Company for Ireland (Limited), 29, Westmorland-street, Dublin.

**WANTED, a 24 in. WINDING AND STAMPING ENGINE.** Particulars to be forwarded to Mr. THOMAS HOLLOW, Lelant, Hayle, March 28, 1864.

**TO IRON MANUFACTURERS.—A PARTY IN GLASGOW,** who has an extensive connection, and who could influence a large trade with Clyde shipbuilders, DESIRES A FIRST-CLASS AGENCY for ANGLE and T-IRON, SHIP and BOILER PLATES, and SHEET IRON, or for any of these singly.—Address, "M. A. C.," care of Messrs. Anderson and Watt, 64, Buchanan-street, Glasgow.

**TO JOINT-STOCK COMPANIES AND OTHERS.—TO BE** LET, A LARGE VIRGIN COAL FIELD, in the CENTRE OF THE GLAMORGAN BASIN, containing all the best seam and other veins of coal, and through the heart of which the Taff Vale Railway runs for about a mile.—For particulars, apply to "D. V. C.," at Messrs. Howes and Co., No. 7, Thavie's Inn, Holborn Hill, London.

**TO BE DISPOSED OF, AN EXTENSIVE GEOLOGICAL** GRANT OF LAND, possessing AURIFEROUS QUARTZ and GREENSTONE LODES.—Particulars, with terms, may be had from ROBT. W. WYNNE, Esq., Cefn-y-mor, Llanbedr, Merionethshire; or Mr. H. P. OWEN, Esq., the same address.

**FOR SALE, 19½ in. FORCING PUMP, 14 in. LIFTING** PUMP, HAND PUMPS, pumping crane, lifting screw, pit chain, and other colliery material.—Apply to Mr. JOHN FARBER, Naislee, near Bristol.

**BLAST ENGINES.—FOR SALE, TWO NEW BLAST** ENGINES, complete. Each will blow 6500 cubic feet of air per minute.—Apply to WM. COULTHARD and SONS, engineers, Blackburn.

**DIVIDEND TEN PER CENT. PER ANNUM.—TO BE** SOLD, FIVE HUNDRED SHARES (of £1 each, fully paid-up), at par, in the WYVISCOSMITE SLATE COMPANY (LIMITED).—Apply to Mr. RUNDALL, 43, Moorgate-street, City.

**MONEY.—CONTRACTORS AND OTHERS** can be ACCOMMODATED WITH LOANS, DISCOUNTS, &c.—Apply to Messrs. WILKINSON and CO., monetary negotiators and arbitrators, &c., 25, Birch-lane, Cornhill, London, E.C.

**THE WICKLOW COPPER MINE COMPANY.**—Notice is hereby given that the HALF-YEARLY ORDINARY GENERAL MEETING of the shareholders of the Wicklow Copper Mine Company will be HELD at the company's offices, 42, Dame-street, Dublin, on SATURDAY, the 30th April, 1864, at One o'clock in the afternoon precisely, for the purpose of receiving the directors' report and statement of accounts, and for the transaction of the ordinary business of said meeting. The transfer books will be closed on and from Monday, the 18th inst., to and including Saturday, the 30th inst. By order, HENRY A. CRUISE, Sec.

**UNITED MEXICAN MINING COMPANY (LIMITED).**—Notice is hereby given that an ORDINARY GENERAL MEETING of proprietors will be HELD at the office of this company, on WEDNESDAY, the 4th day of May next, at One o'clock precisely, when the directors intend to recommend the payment of a dividend. At this meeting George Harris and Charles Morris, Esqs., will retire from office as directors, and John Hibbert and Charles Biggs, Esqs., as auditors, but being eligible severally offer themselves for re-election. The transfer books will be closed on the afternoon of the 23d inst., and re-opened on the day succeeding the meeting. By order of the Board, W. M. BROWNE, Sec.

**NOUVELLE MONTAGNE COMPANY.**—The ANNUAL GENERAL MEETING of shareholders will be HELD at the Hotel de Suede, Liege, on SATURDAY, the 30th April next, at One o'clock P.M. By order of the Conseil d'Administration, V. BOUCHY, Le Directeur General de la Société.

### Gun Cotton Manufactory.

**MESSRS. THOMAS PRENTICE AND CO.,** GREAT EASTERN CHEMICAL WORKS, STOWMARKET, SUFFOLK.

This manufactory has been established for the purpose of preparing GUN COTTON, according to the Austrian process, and was opened on the 28th of January last, under the inspection of Baron Lenk. Messrs. Thomas Prentice and Co. are now able to SUPPLY GUN COTTON, in its most approved form, either for the purposes of engineering and mining, or for military and submarine explosion, and for the service of artillery, as a substitute for gunpowder.

The advantages of Baron Lenk's GUN COTTON are the following:—

- 1.—The same initial velocity of the projectile can be obtained by a charge of gun cotton one-fourth of the weight of gunpowder.
- 2.—There is no smoke from the explosion of gun cotton.
- 3.—Gun cotton does not foul the gun.
- 4.—Gun cotton does not heat the gun to the injurious degree of gunpowder.
- 5.—Gun cotton gives the same velocity to the projectile with much smaller recoil of the gun.
- 6.—Gun cotton will produce the same initial velocity of projectile with a shorter length of barrel.
- 7.—In projectiles of the nature of explosive shells gun cotton has the advantage of breaking the shell more equally into much more numerous pieces than gunpowder.
- 8.—When gun cotton is used in shells, instead of gunpowder, one-third of the weight of the latter produces double the explosive force.

### FOR CIVIL ENGINEERING AND MINING.

- 9.—In driving tunnels through hard rock a charge of gun cotton of given size exerts double the explosive force of gunpowder, so as to render a smaller number of holes necessary.
- 10.—Gun cotton also may be so used as, in its explosion, to reduce the rock to much smaller pieces than gunpowder, and so facilitate its removal.
- 11.—As gun cotton produces no smoke, the work can proceed much more rapidly, and with less injury to the health of the miners.
- 12.—In working coal mines the advantages of bringing down much larger quantities of material with a given charge, and the absence of smoke in the explosion, enable a much greater quantity of work to be done in a given time at a given cost.
- 13.—The weight of gun cotton required to produce a given effect in mining is only one-sixth part of the weight of gunpowder.
- 14.—In blasting rock under water the wider range and greater force of a given charge is a great element in cheapening the cost of submarine work.
- 15.—The peculiar local action of gun cotton, to which the effects of gunpowder show no analogy, enables the engineer to destroy and remove submarine stones and rocks, without the preliminary delay and expense of boring chambers for the charge.

### FOR MILITARY ENGINEERING.

- 16.—The smaller weight of gun cotton offers great advantages in facility of transport, the weight being one-sixth that of gunpowder.
- 17.—The peculiar local action of gun cotton enables the engineer to destroy bridges and palisades, and to remove every kind of obstacle with great facility.
- 18.—For submarine explosion, either in attack or defence, gun cotton has the advantage of a much wider range of destructive power than gunpowder.
- 19.—For the same purpose gun cotton, from its lightness, has the advantage of keeping aloft the water-tight case in which it is contained, while gunpowder sinks it to the bottom.

### FOR NAVAL WARFARE.

- 20.—Where guns are close together, as in the batteries of ships and case-mated forts, the absence of smoke removes the great evil of the firing of one gun impeding the aim of the next, and thus gun cotton facilitates rapid firing.
- 21.—Between decks also the absence of smoke allows continuous rapid firing to be maintained. The absence of fouling and of heating are equally advantageous for naval as for military artillery.

### GENERAL ADVANTAGES.

- 22.—Time, damp, and exposure do not alter the qualities of the patent gun cotton. It has already been preserved 10 years without injury or decay.
- 23.—It can be transported through fire without danger, simply by being wetted, and when dried in the open air it becomes as good as before. In the case of a ship, or a fortress, or a city being on fire, this quality may be of the greatest value.
- 24.—It is much safer than gunpowder, owing to its being manufactured in the shape of rope or yarn. Loose gunpowder escaping from its package, or spilled by accident, is a frequent danger and cause of explosion, from which manufactured gun cotton is free.
- 25.—The patent gun cotton has the peculiarity of being entirely free from the danger of spontaneous combustion, and it is constant and unalterable in its nature; for these reasons it secures that degree of safety and certainty which, at the time of the original invention, the gun cotton of Schönbach did not possess.

Messrs. THOMAS PRENTICE and Co. are now in a position to contract with the owners of mines, engineers, contractors, and governments for gun cotton prepared in the various forms required for their use. Mining charges will be supplied in the rope form, according to the diameters of bore required, and gun cotton match-line will be supplied with it. Instructions as to the method of using it in mines will also be supplied.

The great advantage of gun cotton make its use in practice very much cheaper than its comparative price would appear to show; in blasting rock, for example, the rapidity and quantity of the work done, with a given expense of wages, &c., is largely in favour of gun cotton.

Messrs. THOMAS PRENTICE and Co. are also prepared to manufacture the gun cotton, and deliver it in the form of gun cartridges, adapted to every description of ammunition; all they require for this purpose being a drawing of the gun, gunpowder cartridges, and ammunition, with the specification of weights, sizes, and initial velocities.

Artillerists who prefer to manufacture their own cartridges may make special arrangements with the patentees through Messrs. PRENTICE and Co. Stowmarket, March 10, 1864.

### PORT AUGUSTA AND NORTHERN RAILWAY

COMPANY OF SOUTH AUSTRALIA (LIMITED).

Notice is hereby given that APPLICATIONS FOR SHARES in this company MUST BE SENT IN ON OR BEFORE THURSDAY, the 21st inst.

London, April 14, 1864. H. J. DICKSON, Sec. (pro tem.)

### BRITISH COPPER COMPANY (LIMITED).

Notice is hereby given that the SHARE LIST of this company will be CLOSED on WEDNESDAY, the 20th day of April, at Twelve o'clock, when the allotment will take place.—Offices, 2, Queen-street-place, Cannon-street, E.C.

### NORTH WHEAL SETON COPPER MINING COMPANY

(LIMITED).

Capital £25,000, in 1000 shares of £25 each.

Deposit, £2 10*s.* per share.

CHAIRMAN—J. T. FENTON, Esq., Stapleton House, Leeds, Colliery Owner.

BANKERS—Messrs. Beckett and Co., Leeds.

SECRETARY—G. Simpson, 55, Albion-street, Leeds.

MANAGERS—C. and C. Thomas, Redruth, Cornwall.

This company is formed for the purpose of working the North Seton Mine, which is situate at Camborne, in Cornwall, the richest district in Europe for copper, and to the west of the celebrated Setons and Tolgus Mines, which have realised immense profits, the West Seton Mine alone having returned in one year £49,000, and still being one of the richest mines in the district.

Shafts have been sunk in this sett, and three promising lodes discovered, two of them from 4 ft. to 5 ft. wide, and the other from 7 ft. to 8 ft. wide. Applications for shares and prospectuses to be made to Mr. GEORGE SIMPSON, 55, Albion-street, Leeds.

### CHIVERTON MINING DISTRICT.—MR. R. SYMONS begs to

inform the subscribers to his forthcoming Map that the delay of the publication has arisen from the circumstance that the boundaries of some of the mines are undetermined; as soon as these are settled the work will proceed to completion. Truro, March 24, 1864.

### MR. BRENTON SYMONS will SHORTLY LEAVE for the

WELSH GOLD DISTRICTS, and will be happy to RECEIVE COMMISSIONS FOR PROCURING SETTS, either of GOLD or SILVER-LEAD, or to REPORT on ANY MINERAL PROPERTY. Mr. B. SYMONS will also VISIT the MINERAL FIELD, of which he purposes preparing a geological and mining map. 18, Hatton-garden, E.C.

### MR. BRENTON SYMONS, MINING ENGINEER AND

SURVEYOR, can PROCURE MINING SETTS in ANY DISTRICT in CORNWALL or DEVON.—18, Hatton-garden, E.C.

### MR. BRENTON SYMONS INSPECTS and REPORTS on

ANY MINERAL PROPERTY. In all cases where procurable a plan will accompany his report.—18, Hatton-garden, E.C.

### MR. WILLIAM REAY, Jun., MINING ENGINEER AND

METALLURGIST, has JUST RETURNED from an interesting EXPEDITION to a NEW MINING DISTRICT in BRAZIL, and again places his SERVICES at the DISPOSITION of his FRIENDS and the PUBLIC, to EXAMINE and REPORT UPON MINES or REDUCTION WORKS, especially gold and silver.—Apply personally, or by letter, to Mr. W. REAY, Jun., Spread Eagle Hotel, Gracechurch-street, London, E.C.

### CAPT. C. WILLIAMS, TYN-Y-WERN, TALIESIN,

SHREWSBURY, has had upwards of 20 years' practical experience in mining, during which time he had the entire management of several English and Welsh mines. Now residing in close proximity with most of the CARDIGANSHIRE MINES, he OFFERS HIS SERVICES TO SURVEY and REPORT UPON ANY OF THE MINES in his LOCALITY.

### CAPT. C. WILLIAMS, TYN-Y-WERN, TALIESIN,

SHREWSBURY, has very carefully SELECTED SEVERAL LEAD, COPPER, and GOLD SETTS in the highly mineralised districts of CARDIGANSHIRE and MERIONETH, some of which he is working privately himself, and are turning out very satisfactorily. Mr. WILLIAMS WISHES to MEET with a *bona fide* PARTY who can ASSIST HIM to PROVIDE the NECESSARY MACHINERY to RENDER their PRODUCE MARKETABLE.

### CARDIGANSHIRE MINING OFFICES.

**MESSRS. WILLIAMS, BRAY, AND CO.** beg to inform their mining friends and the public generally that, in consequence of the numerous applications and requests they have received, they now UNDERTAKE the INSPECTING and REPORTING on MINES.

The several members of the firm having had many years' experience in mining in all its branches is the best guarantee of their ability in such matters; and they trust that, by carefully examining the mines they visit, and faithfully reporting thereon, and by constantly watching the progress of both old and new undertakings, they will be able to supply a want that has been greatly felt in the district, and give every information and advice that may be required.

OFFICES, 44, MARINE TERRACE, ABERYSTWYTH.

### MINING OFFICES, 28, PRINCESS STREET, MANCHESTER.

### LEIGH, MOLYNEUX, AND CO., MINE AGENTS AND

SHAREBROKERS, BUY and SELL SHARES of EVERY DESCRIPTION, on commission or for net cash.

Office of the Hazel Grove Silver-Lead Mining Company (Limited), JAMES LEIGH, secretary.



# EAST WHEAL VORTIN AND COPPER MINING COMPANY.

In 6000 shares, on the Cost-book System.

A committee of management will be chosen at the first meeting of shareholders.

BANKERS—The Alliance Bank, Lombury, London.  
The Helston Banking Company, Helston, Cornwall.

LOCAL MANAGERS.

W. J. DUNFORD, Esq., 9, Broad-street-buildings, E.C.

MESSRS. Joseph Vivian and W. C. Vivian, Reskadinick, Camborne, Cornwall.

SOLICITOR—Tufnell Southgate, Esq., 7, King's-bench-walk, Temple, London.

MESSRS. C. and J. H. Mac-Rae, 10, Tokenhouse-yard, and Stock Exchange, London.

The operations of this company are being carried on in the lands of C. W. Popham, Esq., situate in the Breage and Sithney mining district of Cornwall, which, from its past and present returns of tin, ranks as by far the most productive of that mineral in Europe.

The set is very large and extensive, and is held for a term of 21 years from this date, at a minimum rental of £40 per annum, and a royalty of 1-24th of the value of the minerals to be raised and sold; and the whole of the machinery, plant, and leases have been purchased of Mr. Nicholas Smith, the former lessee, who has taken a large interest in the present company.

The situation is all that can be desired, being immediately eastward of Great Wheal Vor Mine; and all the lodes of the Old Wheal Vor Mine, from which tin of the value of upwards of £2,000,000 sterling has been raised and sold, traverses East Wheal Vor from east to west, as also do the rich Wheal Metal and other lodes now being worked by the Great Wheal Vor Company, and yielding tin to the value of £200 to £400 per fathom.

The Old Wheal Vor Mine produced for a lengthened period the greatest quantity of tin ore ever returned by any one mine in the world: its returns were twice or thrice as large as the present yield of Dolcoath Mine, which, next to Old Wheal Vor, has been the richest and most profitable tin mine of modern times, and has given its fortunate proprietors £750 per share in dividends, and the present market value of the shares is £550 to £600.

When Old Wheal Vor was most productive the price of black tin was only £35 to £40 per ton, and on that low price the mine gave profits of £4000 per month; had the average price of black tin been then, as now, upwards of £70 per ton, the profits would have been £10,000 or £12,000 per month at the lowest estimate. The present Great Wheal Vor Company's shares were twelve months ago, selling at about £8 per 500th share, or (say) £360,000 for the mine; the market price since attained, in consequence of the brilliant discoveries of tin made in the Wheal Metal lode, has been £41 to £42 per share, or £245,000 to £250,000 for the mine, and the profits now being made are £18,000 to £24,000 a year, with every prospect of those profits being rapidly and continually increased.

There are upwards of six known and productive lodes in East Wheal Vor, only two of which are now being operated on, and from the shallow levels on these two lodes alone £12,000 or £13,000 worth of tin has already been raised and sold.

The strata in which the lodes are embedded being identical with the strata in Old Wheal Vor and Wheal Metal, it is the opinion of practical and experienced miners that an energetic continuance of the operations now carried on in sinking the shafts and driving the levels, will lead to the discovery at an early period of richer deposits of tin than have already been met with, and that a rich and profitable mine will be speedily laid open; the length on the Old Wheal Vor lodes being fully 700 fathoms, and on the rich Wheal Metal lodes fully 280 fathoms from east to west.

The Wheal Metal lode, now so rich and profitable in Great Wheal Vor, is standing entire in the southern part of East Wheal Vor; therefore, it will be apparent that the present Company's prospects, from vigorous operations being commenced on this lode, are most encouraging.

An important feature connected with the two lodes now being wrought is, that at about the 110 fathom level, these two lodes, viz., "Wheal Bramble" and "Smith's" lodes will form a junction, which junction, in this district, has usually been productive of an immense deposit of tin—and the levels now driving on these lodes are of the most promising description for yielding tin in profitable quantities.

The machinery and surface works of a large and extensive mine are already erected, and have cost £7000 or £8000 at the least; including this sum, and the costs incidental to sinking the shafts and driving the levels on the course of the lodes, a total expenditure has been incurred by previous adventurers of £35,000 to £40,000, so that active operations are being carried on without incurring any other immediate outlay than the ordinary working cost of a mine.

The mine is drained 55 fathoms below the adit level—or about 80 fathoms from surface—by a 40-inch cylinder pumping engine, which is considered of sufficient power to drain it to a much greater depth; a 30-inch stamping engine with sixteen heads of stamps, and the necessary apparatus for drawing the stuff from the mine, have also been erected; the other erections comprising calculating and counting houses, and the necessary buildings for workshops, &c., dressing-floors, and other surface works have also been constructed; the whole of the machinery, buildings, &c., being in good and efficient condition, repair, and working order.

With the view of continuing the exploration and development of the mineral resources of East Wheal Vor with the utmost rapidity and efficiency, and on a more extensive scale, the adventure has been re-constituted by the present proprietors on the Cost-book System, in 6000 shares, with a subscribed paid-up capital of £6000 in hand, which sum being wholly applicable to the development of the mine (in addition to the £35,000 to £40,000 already expended), competent mining authorities consider amply sufficient for placing it in a profitable position.

The present proprietors having already received applications for a large number of shares, have determined to receive applications from the public for a limited portion only of the residue, at £5 per share; £2 per share to be paid as a deposit on application, and the remaining £3 per share on allotment, and if no allotment is made the deposit will be returned without deduction.

A committee of management will be elected at a meeting of shareholders to be held within one month after the closing of the share list.

Applications for shares, in the form annexed, may be made to the brokers; to the Alliance Bank; or to W. J. DUNFORD, Esq., 9, Broad-street-buildings, London, E.C. London, April 8, 1864.

## MINING MANAGERS' REPORTS, &c.

From Capt. THOMAS GILL, Local Manager of Great Wheal Vor.  
April 6, 1864.—East Wheal Vor Mine is in a hill, and near the junction of granite and killas, which agreeably to analogy is the place to find minerals in quantities, and the situation of the mine is in the slope of a hill in the same bed of killas in which the Great Wheal Vor and Metal lodes have been so productive. My opinion of the mine is very favourable, and if properly carried out I consider it a good speculation.

From Capt. EDWARD ROGERS, Manager of Wheal Grylle, and other Mines.  
EAST WHEAL VOR is very extensive, the stratum is killas, and of the same congenial appearance as in the adjoining mines—Great Wheal Vor and Wheal Metal.

BRAMBLE LODE.—The engine-shaft is sunk 6 fms. below the 60 fms. level; the lode is large, productive, and the strata in which it is situated are such that it should be pushed on as fast as possible, as from the present under of this lode and Smith's lode they will form a junction at about the 110 fms. level; a very important point to be arrived at, as judging from the indications on both lodes, which are highly mineralised in different metals, there may reasonably be expected a very rich deposit of tin at and near the point of junction. At the 60 fms. level there is a cross-cut just commenced; about 35 fms. driving will cut Smith's lode; these levels east and west should also be driven, as the lode is large and tiny in different places, and from the extensive manner in which the bottom of the 50 fathom level east has been worked, I should think there must be a rich bunch of tin gone down, which from information I could get was worth £40 per fm.; this place is now full of water, and will be drained by extending the level below.

SMITH'S LODE.—At the 30 fathom level this lode is intersected by a cross-cut from the Bramble lode, and so far as seen is of a promising character, being 4 ft. wide, composed of blende, copper, and rich stones of tin, and should be vigorously operated on. The lode in the rise in this level is producing rich tin. Another important feature is, that Wheal Metal lode runs through this set for 280 fms. in length, and being so rich in Great Wheal Vor Mine, there is every probability of this lode making rich deposits of tin when wrought on. I would remark the pitwork underground is in good working order, and the machinery at surface is sufficient for carrying on operations to a great extent; taking these things into consideration, I should say an outlay of £5000 would be sufficient to prove the points I have here stated, when I have no doubt the mine would be put into a dividend position.

From Capt. MARK REED, Mineral Agent of the Rev. H. M. St. Aubyn, and formerly Manager of the Great Wheal Vor.

March 26, 1864.—EAST WHEAL VOR Mine is situate in the parish of Sithney; it is very extensive, and is in the same basin of killas as that of Great Wheal Vor, the same lodes running through the extent of the set.

BRAMBLE LODE.—The engine-shaft is sunk 5 fms. below the 60 under adit, or about 80 fms. from surface, and partially worked at each succeeding 10 fms. below adit. It resembles Great Wheal Vor main lode in size and appearance, and is likely to be a continuation of the same. I would recommend sinking the engine-shaft with all possible speed to the junction of Smith's lode, which will take place about the 100 or 110, where favourable results may fairly be expected.

SMITH'S LODE.—This is intersected at the 80 by a cross-cut north from engine-shaft 60 fms. and driven on its course about 30 fms.; this lode varies from 2 to 4 ft. wide, composed of friable quartz, chlorite, and rich rock. I recommend a shaft being sunk from surface as expeditiously as possible, to be communicated with the 80, and continued below, where it is more than probable that tin in remunerative quantities will be obtained. I know not where a more inviting property is to be found, with so much work done which will beneficially advance the future working, and save much time and money in the exploration of the mine. Having had the management of the Great Wheal Vor for eight years in the former working—viz., from 1833 to 1846, when the tin raised exceeded 200 tons per month—I can write with great confidence on this mine, as the price of tin then varied from £35 to £45 per ton, and it is now about £70 per ton. The strata in each of these mines are identical, being in the same precise locality. From information I have received, there has been sold from £12,000 to £13,000 worth of tin from the short extent of ground wrought on the lodes. This strengthens my view of the great value of this mining property, and if it is worked vigorously, under careful and able management, in my opinion a capital of about £5000 to £6000, with the returns of tin, will be sufficient to bring the mine into a profitable state of working. There is a 40-inch cylinder pumping-engine with two boilers at work, keeping the mine thoroughly drained, horse-whims, &c.; also a 30-in. cylinder stamping-engine with 16 heads of stamps attached, calciner and dressing-floors, in good working order—in fact, all necessary plant for an extensive field of mining. I would also remark that you have several highly promising side lodes, including the rich Wheal Metal, which runs a distance of nearly 300 fms. through your set; and other lodes both north and south from your present workings, which, being nearly parallel with those already wrought, will I have no doubt, ultimately much enhance the value of this property.

North Roskear, April 13, 1864.—At your request I have carefully inspected this mine, of which the following is my report:—The set is very extensive, is situated in a first-rate mining locality, being immediately east of the celebrated Wheal Vor and Sithney Wheal Metal, formerly forming a part of the same. It is traversed by the same lodes, and is in the same formation of clay-slate in which Great Wheal Vor has been and still is so exceedingly rich in tin; therefore I am decidedly of the opinion that the operations which have just been commenced by the East Wheal Vor Company will be attended by equally successful results. The mine is well supplied with machinery and materials for carrying on an extensive tin mine without let or hindrance.

JOSEPH VIVIAN.

From W. C. VIVIAN, one of the Local Managers.  
April 8, 1864.—EAST WHEAL VOR Mine is situated in the Great Vor mining field. This wonderfully mineralised district consists of a formation of killas, or clay-slate, about two miles in length from east to west, resting between two ranges of granite hills. The western half of this great basin is occupied by the Great Wheal Vor Mines, which have been and are again becoming the richest and most important of all the Cornish tin mines. East Wheal Vor occupies the eastern half of the same extensive basin of killas, resting

similarly on the foot of the eastern range of granite hills, and is traversed by all the lodes of the Great Wheal Vor, viz., those which have yielded such large profits in the past, and those on which such splendid discoveries have recently been made. The set is of great extent, being nearly a mile long in the main lode, and about half a mile in width. Its geological features are precisely the same as those of Great Vor, and the lodes, as far as they have yet been seen, present the same indications, and are in similar strata. There are six known lodes in the set; on one a pumping-engine has been erected, and the shaft sunk to the 60 fms. level; levels have been driven at various points, from which £12,000 or £13,000 worth of tin has been raised and sold. The machinery and plant are all that is necessary for carrying on the mine in the most vigorous and efficient manner, and I consider this mine to be in one of the finest pieces of tin mining ground in Cornwall, not even excepting its adjoining neighbour, Great Wheal Vor, for, although this last-named mine has been immensely rich in the former working, and is becoming equally rich in its present working on other lodes, it must be taken into account that in East Wheal Vor the same lodes which gave the former large profits in Great Wheal Vor, as well as those which are now so rich, run through the entire length of East Wheal Vor in comparatively virgin ground. It is, therefore, only reasonable to expect that an equally large quantity of tin will be met with in the eastern half of this great mining field occupied by East Wheal Vor. And I have no hesitation in stating that all that is wanted to ensure success is perseverance in driving the levels and cross-cuts, and sinking the shafts in an efficient and miner-like manner, without which being energetically done no mine, however rich, can become a success.

## FORM OF APPLICATION FOR SHARES.

To the Manager of East Wheal Vor Tin and Copper Mining Company.

In 6000 shares, on the Cost-book System.

Sir,—I hereby agree to take shares in this company, or any less number that may be allotted to me, at £5 per share, and I herewith hand you a cheque for £ being the deposit of £2 per share on such shares; and I further agree to pay the remaining sum of £3 per share thereon within one week after allotment.

Name ..... Address and description.....

Date ..... Address and description.....

## BANKER'S RECEIPT.

East Wheal Vor Tin and Copper Mining Company.

In 6000 shares, on the Cost-book System. April, 1864.

Received of ..... for the credit of Nicholas Smith, Esq., and others, the sum of £ ..... being the deposit of £2 per share on shares in the East Wheal Vor Tin and Copper Mining Company.

For the Alliance Bank.

CROWAN AND WENDRON TIN AND COPPER MINE (LIMITED).—Adjoins the celebrated Crenver and Wheal Abraham Mines, is leased from the same lord, and contains the same run of lodes.—Apply for prospectuses and shares to JOHN BLACKBURN, solicitor and corner, 63, Abidon-street, Leeds.—Capital £8000, in shares of £1 each; 8000 are already taken up.

## MORRIS SILVER-LEAD MINE.—

LLANIDLOES, MONTGOMERYSHIRE.

On the Cost-book Principle. Divided into 4096 shares.

SECRETARY—Mr. Thomas Roach.

TEMPORARY OFFICES.—No. 9, UNION-COURT, OLD BROAD-STREET.

## ABRIDGED PROSPECTUS.

This company has been formed for the purpose of working the mineral deposits which exist in vast quantities in the Gwynedd Hill, Llanidloes, Montgomeryshire. Several lodes, possessing all the elements for producing lead ore, have been discovered and sufficiently wrought upon to warrant a vigorous exploration of the property. The situation of the grant as a field for mining enterprise is undeniable—the many natural advantages it possesses, such as timber growing on the spot, ample water-power, and its accessibility, being surrounded with good roads, render it a most desirable speculation. Extensive operations can be carried on at a comparatively trifling cost, and it is the opinion of competent judges that it requires nothing but a vigorous prosecution to ensure profitable results. At a meeting of the shareholders of Morris Silver-Lead Mining Company, held this 8th day of April, 1864, the accounts for January and February, showing a balance in favour of the adventures of £64 18s., having been examined,—

It was resolved—

That the same be and are hereby allowed and passed.

That the present number of shares (1024)—in order to comply with the wishes of gentlemen desirous of taking an interest in the undertaking—be and are hereby subdivided into 4096 shares.

A limited number of shares, at £1 each, are offered to the public, for which early application should be made to the secretary, Mr. THOMAS ROACH, at the temporary offices of the company, 9, Union-court, Old Broad-street, E.C., where detailed prospectuses, capitalists' reports, and every information may be obtained, and where samples of the ore, barytes, &c., may be seen.

## THE TRELECH LEAD MINING COMPANY (LIMITED).

To be incorporated under the Companies Act, 1862, by which the liability of each shareholder is limited to the amount of his shares subscribed. Capital, £25,000, in 25,000 shares of £1 each, of which a large portion has been already subscribed. With power to increase.

Deposit, 5s. per share on application, and 5s. on allotment.

Future calls not to exceed 2s. 6d. per share, at intervals of not less than three months.

DIRECTORS.—[London.] L. E. W. MORRIS, Esq., Carmarthen.

JOHN MAUGHAN, Esq., Leamington Priory, and 7, Lancaster-terrace, Regent's-park.

JOHN LEWIS, Esq., merchant, Carmarthen.

R. B. TENNENT, Esq., merchant, 12, Walbrook.

GUSTAV HIRSCHFELD, Esq., 24, Cannon-street West.

RICHARD HUMPHREYS, Esq., 72, Wimpole-street, Cavendish-square, London.

JOSEPH LAVENDER, Esq., 26, Bedford-row, London.

(With power to add to their number.)

BANKERS—London Bank of Scotland, 24, Old Jewry; Messrs. Wilkins, Carmarthen.

SECRETARY—F. R. Greenhill, Esq.

MINING AGENT—Captain R. Sanders.

OFFICES (pro tem.)—63, GRACECHURCH STREET, LONDON.

## ABRIDGED PROSPECTUS.

This company is formed for the purchase of the valuable lead mines called the Carmarthen United Mines, situate in the parish of Trelech, Carmarthenshire, as held by them under various favourable leases, at very moderate royalties, together with the water-course and plant, machinery, dwelling houses, &c., and for the purpose of further developing and extending the workings of the said mines.

In the event of a sufficient number of shares not being subscribed all deposits will be returned in full, as also in cases where no allotment is made.

Specimens of the ore can be seen at the British Museum, and at the Geological Museum, in Jernyn-street, and also at the offices of the company, where prospectuses, containing full reports of Mr. Evan Hopkins and Capt. Waters and Sanders, with forms of application, may be obtained, as well as of the bankers of the company.

## THE DEVON CONSOLS TIN MINING COMPANY (LIMITED).

Capital £15,000, in 15,000 shares of £1 each. Deposit 10s. on application, and 10s. on allotment. Incorporated under The Companies Act, 1862, whereby the liability of each shareholder is specially limited to the amount of his shares.

DIRECTORS.—THOMAS BRADSHAW, Esq., Hampton-court.

JAMES BRAD, Esq., M.D., Director of Les Grandes Mines Consolidées de Villemagne.

WILLIAM CREMER, Esq., Director of the Terricio Copper Mining Company.

J. O. MASON, Esq., Director of the London, Birmingham, and South Staffordshire Banking Company (Limited).

B. L. PHILLIPS, Esq., Director of the European Bank (Limited).

GEORGE VESEY, Esq., Director of Les Grandes Mines Consolidées de Villemagne (Limited).

LIEUT.-COLONEL WEMYSS, Director of the Haven Silver-Lead Mining Company (Limited).

BANKERS—London and County Bank.

BROKERS—Messrs. Smith and Hinney, 5, Abidon-court.

CONSULTING ENGINEER—Josiah Hugo Hitchens, Esq.

SOLICITORS—Messrs. Jas. Taylor, Mason, and Taylor, 16, Farnall's-lane, London.

SECRETARY (pro tem.)—Thomas Spillman, Esq.

OFFICES—8, LANCASTER-PLACE, STRAND, W.C.

## PROSPECTUS.

This company is formed for working the extensive tin mines situate on the south-eastern mountainous ranges of Dartmoor, comprising extensive limits. The leases are held under the Prince of Wales and Lord Clurston for twenty-one years from 1863, subject to the payment of 1-16th duty only.

The various lodes contained in the property now to be transferred to the company are those of the well-known Batchelor's Hall, White Woods, Nun's Cross, and Allaborough Tin Mines, which may confidently be expected to yield unusual profits, judging from the rich tin ore which is now seen in the lower levels; these are doubtless some of the once very productive tin mines of Dartmoor, which are yet to be rendered more profitably productive by employing capital, skill, and energy to open them out deeper. This will be done, seeing the great success that has attended the deeper working of the old Birch Tor and Vitifer Mines, which promise before long to rank amongst the most profitable tin mines of Devon and Cornwall.

I would be here out of place and unnecessary to enter into minute details to form a correct opinion of the value of this mine, as the accompanying able report of Mr. Josiah Hugo Hitchens, the consulting mining engineer to the Devon Great Consols, is sufficiently conclusive to justify the directors in recommending this mine as a safe and very valuable investment.

The present owners of the mine having expended a large sum of money in putting the machinery in proper working order, and clearing many of the old levels, the directors have made most satisfactory arrangements with them for the transfer to the company of the property, machinery, and leases, for the sum of £5000, the whole of which is to be taken in fully paid-up shares.

Prospectuses, with reports, can be had at the offices of the company, or the brokers. Applications for the remaining shares must be made to the directors, accompanied with a banker's receipt for the deposit of 10s. per share, in the accompanying form.

## FORM OF APPLICATION FOR SHARES.

To the Directors of the Devon Consols Tin Mining Company (Limited).

GENTLEMEN,—Having paid to the London and County Bank the sum of £ ..... being a deposit of 10s. per share on shares in the above company, I request that you will allot me that number of shares of £1 each in the said company, and I hereby undertake to accept the same, or any less number that you may allot to me, and to pay the further deposit of 10s. per share on allotment, and request you to place my name on the register of shareholders in respect of the shares allotted to me.

Name in full.....

Date..... Address.....

## THE CREDIT MOBILIER COMPANY OF LONDON (LIMITED).

84, THREADNEEDLE STREET, LONDON, E.C.

BANKERS—The London and Westminster Bank, Lombury, E.C.

The company discount approved mercantile and other bills, make advances on negotiable securities, and undertake financial business generally.

WILLIAM HALL, Sec.

## In Chancery.

REDRUTH, CORNWALL.

TO BE SOLD, BY PUBLIC AUCTION, pursuant to an Order of the High Court of Chancery made in the Cause of Brune v. Collins, with the approbation of the Master of the Rolls, in Forty-five Lots, by Mr. W. F. COSGROVE (the person appointed by the said Judge), at Tabby's Hotel, Redruth, in the county of Cornwall, on Thursday, April 24th, 1864, at Twelve o'clock at noon, the FEE SIMPLE IN POSSESSION of and in SEVERAL EXTENSIVE and VALUABLE MINERAL PROPERTIES in one of the most productive mining districts of the county.

THE REVERSION of the greater part of the VALUABLE BREWERY PREMISES, known as the REDRUTH BREWERY, and of certain OTHER FREEHOLD PROPERTIES, comprising altogether EIGHTY DWELLING HOUSES, SHOPS, WAREHOUSES, BAKEHOUSE, GARDENS, and OFFICES, situate respectively in Redruth Highway, Fore-street, North-row, Ford's-row, Shute-row, Park Hambley, Rose-row, Green-lane, the West End, and other parts of and in the town and parish of Redruth, in the county of Cornwall.

Printed particulars and conditions of sale, with plans, may be had gratis in London of Messrs. COOKE, KINGDOM, and CORROD, solicitors, 10, King's Arms-yard, Moorgate-street; at St. Austell of Messrs. SHILLON, COOPER, and CO., solicitors, and the auctioneer; at St. Columb of Mr. G. B. COLLINS, solicitor; at the place of sale; and at all the principal hotels in the county.—Dated this 19th day of March, 1864.

## In the Court of the Vice-Warden of the Stannaries.

Stannaries of Devon.

IN the MATTER of the COMPANIES ACT, 1862, and of the HUCKWORTHY BRIDGE CONSOLS MINING COMPANY.—ALL CREDITORS or CLAIMANTS of the ABOVE-NAMED COMPANY, who have not received notice from the Registrar of the said Court that their claims have been already admitted, are hereby required to COME IN and PROVE THEIR SEVERAL DEBTS or claims, at the Registrar's Office, Truro, on or before the 25th day of April, 1864, or in default thereof they will be excluded from the benefit of any distribution made before such proof.

And for the purpose of such proof they are either to attend in person, or by their solicitors or competent agents, or (unless such attendance be required by the Registrar's summons) they are to send affidavits of their several debts or claims to the Registrar of the said Court, at Truro, such affidavits being sworn either before some Commissioner of the said Court, or before any Court, Judge, Justice, or any Commissioner of one of the superior Courts, lawfully authorised to take and receive affidavits and affirmations.

WILLIAM MICHELL,

Registrar of the above-named Court, Truro, Cornwall.

Dated the 14th day of April, 1864.

## In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WHEAL CHERRY MINING COMPANY.—ALL CREDITORS or CLAIMANTS of the ABOVE-NAMED COMPANY, who have not received notice from the Registrar of the said Court that their claims have been already admitted, are hereby required to COME IN and PROVE THEIR SEVERAL DEBTS or claims, at the Registrar's Office, Truro, on Wednesday, the 27th day of April, inst., or in default thereof they will be excluded from the benefit of any distribution made before such proof.

And for the purpose of such proof they are either to attend in person, or by their solicitors or competent agents, or (unless such attendance be required by the Registrar's summons) they are to send affidavits of their several debts or claims to the Registrar of the said Court, at Truro, such affidavits being sworn either before some Commissioner of the said Court, or before any Court, Judge, Justice, or any Commissioner of one of the superior Courts, lawfully authorised to take and receive affidavits and affirmations.

WILLIAM MICHELL,

Registrar of the above-named Court, Truro, Cornwall.

Dated the 14th day of April, 1864.

## CROOKHAVEN MINE, CORK, IRELAND, WITH THE MACHINERY, MATERIALS, &c., FOR ABSOLUTE SALE.

MR. T. P. THOMAS has been instructed by the Liquidators to OFFER FOR SALE, BY PUBLIC AUCTION, at Garraway's Coffee-house, Change-alley, Cornhill, London, on Thursday, the 21st day of April, 1864, at One o'clock, precisely, in One Lot, and subject to the conditions which will be printed and produced, all that VALUABLE MINING PROPERTY, known as the CROOKHAVEN MINE, in the county of Cork, Ireland, together with the EXTENSIVE BUILDINGS, MACHINERY, STORES, and MATERIALS, forming the whole of the PLANT and PROPERTY of the COMPANY, and upon and belonging to the said MINE, comprising, amongst other things, a 26 in. cylinder PUMPING ENGINE, and 8 ton BOILER.

For particulars, and to view, application may be made to the agent, at the mine, and for further particulars and conditions of sale application to be made to Mr. CHARLES THOMAS, 3, Great St. Helen's, Bishopsgate-street; at the MINING JOURNAL office, 36, Fleet-street, E.C.; at Garraway's; or to the auctioneer, at his offices, 2, Crown-court, Threadneedle-street, London.

## FOR SALE, BY AUCTION, EAST WHEAL MARTHA MINE, LAMERTON, IN THE COUNTY OF DEVON.

MR. T. P. THOMAS has received instructions from the Liquidators to SELL, BY



TO COAL MASTERS, IRON MASTERS, AND OTHERS.

**MR. HILLIARD WILL SELL, BY AUCTION,** at the Navigation Inn, Froghall, on Thursday, the 5th day of May, 1864, at Two o'clock in the afternoon, in one or more lots, and subject to such conditions of sale as shall be produced, a VALUABLE FREEHOLD ESTATE, called HARSTON WOOD, containing 37 A. 0. 11 P. (more or less), situate at FROGHALL, in the parish of KINGSLEY, in the county of STAFFORD, and adjoining the Causton Low Railway. The estate contains VALUABLE MINES OF COAL, RED IRONSTONE, and OTHER ORES, and adjoins property in which such mines are being worked. To view the property, apply to Mr. WILLIAM PUGH, Fox Wood, near Froghall; and to inspect plans, or for any further information, apply to the owner, Mr. RICHARD FRYER SMITH, or to Mr. THACKER, solicitor, both of Chasell, Staffordshire.

**VALUABLE COPPER MINE FOR UNRESERVED SALE.**—TO BE SOLD, BY AUCTION, and without reserve, on the 4th day of May proximo, at One o'clock precisely, on the mine, near North Molton, in the county of Devon, the LEASE (renewed for 21 years on the 17th day of February, 1864, at a royalty of one-fifth of the net value of the produce) of the whole of the very extensive BAMPFYLDE COPPER MINES, including the LARGE and IMPORTANT ADDITIONAL SETT recently granted by Lord Poltimore, free of any extra charges, together with the entire and complete PLANT and MACHINERY thereon, with large and commodious dwelling-house, cottages, offices, and garden, HORSEPOWER, STEAM ENGINE and BOILER, winding gear, &c., large WATER WHEELS, pumps of various sizes, ropes, chains, ladders, jigs, bobs, drawing wheel and crushers, and all other windlasses, whims, launders, balance bobs, drawing wheel and crushers, and all other requisites for the efficient working of the mine. Also, four Berdan's machines (never used), pans 6 ft. 8 in. diameter within 45 cwt. each, with four iron balls 2 tons each, and four ditto 16 cwt. each. The whole on view, with the necessary plans, any time prior to the day of sale.

Parties can proceed to the mine via Barnstaple or South Molton road station. N.B.—The average produce of the above exceeds in quality that of any other English mine, 1582 tons of ore having yielded £22,334 net, and this including balance, up to December last; and the vendors, having no alternative but to wind-up the present company, have to state their sincere remembrance of the mines in the kingdom.

The whole mine is now set to tributaries at 10s. in £1; is sunk to the 70 fm. level. The 58 fm. level is driven to No. 4 cross-course, and so on as the lodes on the western side of this cross-course shall have been intersected the most satisfactory results may, with every reasonable certainty, be expected. The mine has been thoroughly inspected at different periods, and very favourably reported upon by Captain James Richards, of the Devon Great Consols; Capt. William Richards, of Wheel Bassett; Capt. James Pope, of Wheel Bassett; Geo. Henwood, Esq., of London; Wm. Hensley, Esq., of Mansel; and others.

Catalogues, together with conditions of sale, at 1s. each, to be had at the mine, on application to Capt. Pope; or in Liverpool from Mr. CHAS. HAND, Hope Chambers, Leather Lane, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, which

MONMOUTHSHIRE.

VALUABLE MINERAL PROPERTY FOR SALE.

By Trustees under the direction of the will of the late Owner.

**TO BE SOLD BY TENDER,** the following FREEHOLD HOUSES AND LANDS, situate at ABERCERNE, in the parish of MYNYD-DYSLWYD, in the county of MONMOUTH; also, a COPYHOLD ESTATE near thereto, held of the MANOR OF ABERCERNE, which from their proximity to the ABER-ARNE COLLIERIES, all the SEAMS and VEINS OF COAL, IRONSTONE, FIRE-CLAY, and other MINERALS discovered in those pits are supposed to be found under these properties, and which will be disposed of with the same.

The FREEHOLD PROPERTY, called "TIR THOMAS SHON," is numbered in the title-deed and book of reference of the said parish as follows:—2806, 2807, 2808, 2810, 2811, 2812, 2814, and 2824, and contain 17 A. 2 R. 19 P., upon part of which are six dwelling-houses at will, and upon another part are twelve houses, erected by different tenants, under leases; the surface of this property produces an annual rental of £63.

GLANSHON ESTATE is copyhold, held of the Manor of Abercerne, and numbered in the title-deed and book of reference of the said parish 2869, 2870, 2871, 2873, 2874, 2875, 2876, 2877, 2878, 2879, 2880, 2882, 2883, 2885, 2886, 2889, 2891, 2892, 2893, 2894, 2896, 2897, and 2898, and is described in the said book of reference as containing 74 A. 3 R. 14 P.; the surface of this estate is now let at well situated for building, and it is expected in a few years a large portion will be let for that purpose; and with regard to the minerals under both properties, it is stated by competent judges that the veins lie well for working, and are unbroken by any known fault; and, as they are intermixed, and form part of a large tract of malden land in that locality, the minerals under them, and the facilities they offer for the working of the minerals in the adjoining lands, render them a valuable acquisition to the owners of such lands, or to capitalists wishing to embark in mining pursuits.

Tenders to be addressed to Mr. W. G. REES, Holly House, near Newport, Monmouthshire, from whom all further information may be obtained.

**IRON AND STEEL PATENTS FOR SALE.**—The OWNER of VALUABLE PATENTS for the MANUFACTURE of FIRST-CLASS STEEL at a low price, and for the UTILISATION of BLAST FURNACE CINDERS, being fully occupied with the development of the inventions in America, is DESIROUS of SELLING the ENGLISH, FRENCH, and BELGIAN PATENTS.—Terms, under £30,000 for the whole.—Letters addressed "Union" MINING JOURNAL office, 26, Fleet-street, London, E.C., will be forwarded.

**WHEAL MARY GREAT CONSOLS MINE.**—TO BE SOLD, BY PRIVATE CONTRACT, the MINE and MINERALS of WHEAL MARY GREAT CONSOLS, ST. NEOT, CORNWALL, having engine-power sufficient to develop the property. Many of the present adventurers are willing to join a party who may purchase in the further prosecution of the mine.—For further particulars, apply to J. C. BROWN, Esq., Rose Hill, Chesham, Bucks; W. BRADLEY, Esq., Soho Brewery, Sheffield; J. C. BROWN, Esq., merchant, Liskeard; or to Mr. C. THORPE, at the mine, March, 1864.

**IMPORTANT TO COAL PROPRIETORS, CAPITALISTS, AND OTHERS.**—The OWNERS of VALUABLE MINES OF COAL, lying within and under a compact freehold estate of 150 acres, situate about three miles from the important manufacturing town of Blackburn, Lancashire, are PREPARED to treat for the ABSOLUTE SALE of the COAL, or to enter into favourable arrangements for leasing the same for a term of years. Good turnpike roads intersect the estate, and the same is within very easy distance of railway and canal.—For further particulars, apply to Messrs. ROBINSON and SON, solicitors, Blackburn.

**COAL PROPERTY IN SHROPSHIRE.**—An ESTATE in SALOP, declared by competent persons to CONTAIN COAL in ABUNDANCE beneath its surface, and upon which several openings have now been made, proving the accuracy of these opinions, will be LEASED upon favourable terms to ANY RESPONSIBLE PERSON DESIROUS of WINNING and WORKING the COAL. Coal pits in the immediate neighbourhood are in full work and paying well, and there are indications that the coal beneath the estate in question is of very superior quality. There is a canal running close to the property, and all coal raised can be readily sold at a small distance from the place.—Address, "K. O.," MINING JOURNAL office, 26, Fleet-street, London, E.C.

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The estates are intersected by the West Hartlepool and North-Eastern Railways, by means of which great facilities are afforded for vending the coal and coke for shipment, for landside, and for supplying the great and increasing demand for manufacturing the ironstone now so extensively worked in the adjoining district of Cleveland.

A sufficient number of cottages for the workmen required for an extensive colliery, also agents' houses and offices, have been built on the estate, and are the property of the Earl of Eildon.

The situation of this property, its favourable position as regards the Cleveland ironstone district, and the abundance of coal and limestone underneath the estate, suggest the locality as being well suited for the erection of blast-furnaces and ironworks.

The new lease can have the current going stock belonging to the lessors at a valuation.

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1204	Devon Gt. Con. (cop.), Tavistock [S.E.]	1 0 0	—	550 550	756 10 0	8 0—April, 1864
354	Dolcoath (copper, tin), Camborne	128 17 6	—	—	0 18 0	0 1 6—May, 1863
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300	East Darnley (lead), Carnarvon	32 0 0	—	—	1 0 0	0 7 6—Jan. 1864
128	East Pool (tin, copper), Pool, Illogan	24 6 0	—	—	63 0 0	1 0 0—April, 1864
1906	East Wheal Lovell (tin), Wendron	2 13 6	—	12% 16% 17	1 0 0	0 3 0—Feb. 1864
2800	Foxdale (lead) Isle of Man [L.]	25 0 0	—	—	0 6 0	0 6 0—Mar. 1864
6000	Frank Mills (lead), Christow	3 18 6	—	—	418 10 0	3 0 0—Mar. 1864
12500	Great Laxey (lead), Isle of Man [L.]	4 0 0	—	6	2 12 0	7 0 0—Feb. 1864
1788	Great Wheal Fortune (tin), Breage	18 6 0	—	17% 15% 16%	5 15 0	0 10 0—Nov. 1863
8908	Great Wh. Vor (tin, cop.), Helston [S.E.]	40 0 0	—	36	3 7 6	0 10 0—Mar. 1864
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1024	Herodfoot (id.), near Liskeard [S.E.]	8 10 0	—	—	28 0 0	1 15 0—Feb. 1864
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6000	Marke Valley (copper), Caradon	4 10 0	—	5% 6	2 12 0	7 0 0—Feb. 1864
1800	Miners Mining Co. [L.] (id.), Wrexham	25 0 0	—	—	135 18 0	7 0 0—July, 1863
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250	Nant-y-llyn (lead), Montgomery	20 0 0	—	—	6 0 0	1 0 0—Mar. 1864
6000	New Birch Tor and Vitrifer Cons. (tin)	1 6 8	—	23% 3	0 8 0	0 2 6—April, 1864
9236	North Trekerby (copper), St. Agnes	1 0 0	—	3% 3 3%	0 13 0	0 2 6—Feb. 1864
6400	Par Consols (cop.), St. Bazez [S.E.]	1 2 6	—	—	86 19 0	0 2 6—Mar. 1863
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1773	Pelberron (tin), St. Agnes	15 0 0	—	—	7 19 6	0 10 0—Nov. 1863
612	Pelberron (tin), St. Agnes	3 0 0	—	—	9 15 0	0 7 6—April, 1864
1123	Providence (tin), Uny Lelant [S.E.]	10 6 7	—	43	72 5 0	1 0 0—Jan. 1864
6000	Rosewall Hill and Ransom United	2 16 0	—	—	0 10 0	0 1 6—June, 1863
512	South Caradon (cop.), St. Cleer [S.E.]	1 5 0	—	460	432 10 0	6 0 0—Mar. 1864
512	South Tolguis (cop.), Redruth, Cornwall	8 0 0	—	37% 40	74 10 0	1 0 0—May, 1863
496	S. Wh. Frances (cop.), Illogan [S.E.]	18 18 6	—	—	370 13 6	1 0 0—Nov. 1863
4000	St. Day United (tin), Redruth	14 0 0	—	10% 10 10%	0 6 0	0 5 0—Mar. 1864
940	St. Ives Consols (tin), St. Ives	8 0 0	—	—	489 10 0	1 0 0—Feb. 1864
6000	Tintincoff (cop., tin), Pool, Illogan [S.E.]	9 0 0	—	19	14 8 6	0 10 0—Mar. 1864
4200	Vigra and Clogon (copper) [L.]	1 10 0	—	38	5 8 6	1 15 0—Mar. 1864
6000	West Basset (copper), Illogan [S.E.]	1 10 0	—	—	25 3 0	0 5 0—Mar. 1864
9000	W. Chiverton (id.), Perranzabuloe [S.E.]	82	—	77 80	1 10 0	0 15 0—Jan. 1864
256	West Damsel (copper), Gwennap	38 10 0	—	—	48 0 0	1 0 0—Jan. 1864
400	W. Wh. Seta (cop.), Camborne [S.E.]	47 10 0	—	210	405 0 0	4 0 0—April, 1864
512	Wheal Basset (copper), Illogan [S.E.]	5 2 6	—	90	698 10 0	1 10 0—April, 1864
1000	Wheal Basset and Grylls (tin)	7 0 0	—	14 15	3 0 0	0 10 0—Oct. 1863
1024	Wheal Grylls (tin), Perranzabuloe	2 4 0	—	27	6 2 0	1 0 0—Sept. 1863
512	Wheal Jane (silver-lead), Ken	3 10 0	—	—	14 0 0	0 10 0—Mar. 1864
4296	Wheal Kitty (tin), St. Agnes	5 4 6	—	7% 7% 7%	1 8 6	0 5 0—Jan. 1864
1024	Wheal Kitty (tin), St. Agnes	5 4 6	—	14	2 9 0	0 7 6—April, 1864
1024	Wheal Mary Ann (id.), Menheniot [S.E.]	8 0 0	—	14	76 5 0	0 0 0—May, 1864
1024	Wheal Mary Ann (id.), Menheniot [S.E.]	8 0 0	—	14	57 17 6	0 10 0—Mar. 1864
80	Wheal Owles (tin), St. Just, Cornwall	70 0 0	—	—	338 3 0	5 0 0—Feb. 1864
396	Wheal Seta (tin, copper), Camborne	58 10 0	—	200	176 15 0	4 0 0—April, 1864
1040	Wh. Trelawny (all-id.), Liskeard [S.E.]	5 17 0	—	24	49 0 0	0 15 0—Feb. 1864
2044	Wheal Tremayne (tin), Gwinnear	6 11 3	—	—	0 15 0	0 5 0—Nov. 1863
7000	Wicklow (copper) [L.]	2 10 0	—	—	14 5 0	1 6 0—Aug. 1863

[\* Dividends paid every two months. † Dividends paid every three months.]

## BRITISH MINES WITH DIVIDENDS IN ABEYANCE.

240	Boscan (tin), St. Just	20 10 0	—	—	36 10 0	1 0 0—Mar. 1862
1800	Carn Brea (copper, tin), Illogan	15 0 0	—	—	278 10 0	2 0 0—Feb. 1862
3000	Chiverton (lead), Perranzabuloe [S.E.]	15 0 0	—	12% 12 12%	85 0 0	2 0 0—June, 1867
246	Conduen (cop., tin), Camborne	35 0 0	—	—	1 7 0	0 7 0—May, 1862
2460	Cook's Kitchen (copper), Illogan	17 15 9	—	—	2 7 6	—Sept. 1862
1024	Copper Hill (copper), Redruth	12 0 0	—	—	0 10 0	0 4 0—June, 1862
1055	Craddock Moor (copper), St. Cleer	8 0 0	—	—	0 17 0	0 2 6—Jan. 1863
4076	Devon and Cornwall (cop.), Tavistock	5 16 3	—	—	41 13 0	0 2 6—Jan. 1860
8000	Dryngwm (lead), Wales	12 6 0	—	—	0 17 0	0 2 6—Jan. 1860
940	Fowey Consols (copper), Tywardreath	4 0 0	—	—	0 3 0	0 1 6—Mar. 1862
6000	Great South Loe (S.E.), Redruth	5 14 6	—	3% 3 3%	0 3 0	0 1 6—Mar. 1862
10240	Gunn's Lake (Clitters' Adit)	0 2 0	—	—	1091 0 0	5 0 0—May, 1860
160	Levant (copper, tin), St. Just	2 10 0	—	—	18 18 1	0 7 6—Aug. 1862
640	Mount Pleasant (lead), Mold	4 0 0	—	—	0 10 0	0 4 0—Mar. 1862
5000	Orehead (lead), Flintshire	0 8 0	—	—	0 5 0	0 5 0—Dec. 1862
6000	South Exmouth (lead), Christow	1 5 0	—	—	0 9 15 0	1 0 0—June, 1862
280	Spargne Moor (tin, copper), St. Just	31 17 6	—	—	7 0 0	0 10 0—Sept. 1862
672	Trelon Consols (tin), St. Ives	12 10 0	—	—	11 0 0	2 0 0—Mar. 1862
1000	Trumpet Consols (tin), near Helston	11 10 0	—	—	8 15 0	1 0 0—Jan. 1861
12000	Twelve Apostles Anal. (id.), Wrexham	15 10 0	—	—	14 10 0	3 0 0—June, 1861
1024	Wendron Consols (tin), Wendron	15 10 0	—	—	101 1 3	0 10 0—Oct. 1862
60	West Barton Gill (lead), Yorkhill	50 0 0	—	—	0 19 0	0 3 0—May, 1862
1024	West Caradon (cop.), Liskeard [S.E.]	5 0 0	—	21	2400 10 0	6 0 0—Feb. 1861
6400	West Fowey Consols (tin and copper)	7 10 0	—	—	284 5 0	4 0 0—Mar. 1862
128	Wheal Friendship (copper), Devon	80 0 0	—	—	—	—
100	Wheal Mary (tin), Lelant	32 6 0	—	—	—	—

## FOREIGN DIVIDEND MINES.

30000	Australian (cop.), S. Australia [S.E.]	7 7 6	—	—	0 1 0	0 1 0—Dec. 1863
2464	Burra Burra (cop.), South Australia	5 0 0	—	76	310 0 0	5 0 0—June, 1863
6000	Central American (silver) [L.]	40 0 0	—	—	92 12 0	1 0 0—Dec. 1863
12000	Cobre Copper (cop.), Cuba [S.E.]	40 0 0	—	37	0 9 0	0 9 0—Dec. 1863
100000	Don Pedro No. Del Rey [L.] [S.E.]	0 10 0	—	3% 3 3%	1 10 0	0 2 6—Feb. 1864
70000	English and Australian [S.E.]	5 0 0	—	—	7% per cent.	Yearly
18000	East Indian Coal, Calcutta [L.]	10 0 0	—	—	0 11 4	0 3 0—Feb. 1864
25000	Fortuna (lead), Spain [L.] [S.E.]	2 0 0	—	4	19 15 0	0 10 0—June, 1863
26000	Gen. Mining Assoc., Nova Scotia [S.E.]	20 0 0	—	22	0 11 0	0 1 0—Jan. 1863
68000	Kapunda Mining Co., Australia [S.E.]	1 0 0	—	—	0 11 2	0 5 0—Oct. 1863
16000	Linares (id.), Pozo Ancho, Spain [S.E.]	3 0 0	—	67	0 7 3	0 3 0—Jan. 1864
10000	Pontgibaud (all-lead), France [S.E.]	20 0 0	—	—	0 11 0	0 1 0—Jan. 1864
97500	Port Phillip (cop.), Clunes [S.E.]	15 0 0	—	14% 14%	61 5 0	3 0 0—Dec. 1863
11000	St. John del Rey [L.] [S.E.]	15 0 0	—	48	2 9 0	0 7 6—May, 1863
11174	Unit, Mexican (all), Mexico [S.E.]	28 5 0	—	7	0 5 0	0 5 0—Oct. 1863
10000	Vancouver (coal) [L.]	5 0 0	—	—	0 7 0	0 3 0—Nov. 1863
30000	West Canada Mining Company [L.]	1 0 0	—	—	0 5 0	0 5 0—Aug. 1863
45000	Yudana Matana (cop.), S. A. [L.] [S.E.]	3 0 0	—	3% 3 3%	—	—

## FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

10000	Alten and Quenangen Unt. (cop.) [L.] [S.E.]	4 10 0	—	—	4 5 0	0 15 0—Nov. 1863
10000	Copago Mining Company, Chili [S.E.]	16 0 0	—	—	6 18 0	0 10 0—Nov. 1862
10000	Gt. Barrier Land, Min. Co. N. Z. [L.] [S.E.]	10 0 0	—	—	18 per cent.	May, 1863
10000	Lusitania (of Portugal) [S.E.]	2 0 0	—	—	0 19 9	0 1 6—Feb. 1862
10816	Martinita and New Granada [S.E.]	1 0 0	—	—	0 9 6	0 1 6—July, 1863

## NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
30000	Anglo-Brazilian (gold) [L.] [S.E.]	0 5 0	—	—	Dec. 1863
35000	Alamillos (lead), Spain [L.]	0 10 0	1½	1 1½	—
90000	Bearitz Tin Streaming Company [L.]	0 17 6	—	—	Oct. 1863
75000	Born Accord, South Australia (copper) [L.] [S.E.]	1 0 0	—	—	Fully paid.
15000	Cape Copper Mining Company [L.] [S.E.]	7 0 0	13½	13 13½	Feb. 1864
25000	Capula (silver), Mexico [L.] [S.E.]	1 0 0	—	¾	Feb. 1864
17000	Central Italian (copper) [7000 £ paid]	0 6 0	—	—	Jan. 1863
60000	Clarendon Consols (copper), Jamaica [S.E.]	1 2 6	—	—	July, 1862
10000	Copago Smelting [L.]	10 0 0	—	—	Fully paid.
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0	—	—	Fully paid.
30000	East del Rey (gold), Brazil [L.] [S.E.]	1 5 0	—	—	Oct. 1863
15000	East Kongberg Native Silver Mining Co. of Norway [L.] [S.E.]	1 12 0	—	—	Dec. 1863
80000	El Chico Mining and Reduction (silver) [L.] [S.E.]	3 0 0	—	—	Mar. 1864
20000	Elbe Colliery Company, Bohemia [L.]	1 0 0	—	—	Fully paid.
80000	Ellerslie and Bardowie (copper), Jamaica	0 18 0	—	—	July, 1859
8000	English and Canadian Mining Company [L.]	5 0 0	—	—	Fully paid.
40000	Fortune (copper), West Australia [L.]	2 0 0	—	—	Fully paid.
50000	Frontino and Bolivia (gold), New Granada [L.] [S.E.]	0 10 0	—	—	Mar. 1864
30000	Great Northern (copper), South Australia [L.] [S.E.]	1 10 0	—	—	June, 1862
4000	Hindostan (copper), Bengal [L.] [S.E.]	3 0 0	—	—	Feb. 1863
4000	Hope Silver-Lead and Copper Mining Co. [L.]	25 0 0	—	—	Fully paid.
10000	Karibits Colliery Company [L.]	1 0 0	—	—	Fully paid.
30000	Lagunas (sulphur, copper), Portugal [L.]	1 0 0	—	—	Fully paid.
100000	Montes Aures (gold), Brazil [L.] [S.E.]	2 0 0	2½	—	Fully paid.
3000	New Burra Burra (copper) (Australia)	5 0 0	—	—	Aug. 1862
10000	New Grand Duchy of Baden (silver-lead), near Freiburg	1 0 0	—	—	Nov. 1863
80000	North Rhine Copper of South Australia [L.] [S.E.]	0 17 6	—	—	Nov. 1863
50000	Nova Scotia (lead and gold) [L.] [S.E.]	1 0 0	—	—	June, 1863
16000	Pachuca Silver Mining Company, Mexico [L.]	1 0 0	—	—	Feb. 1864
50000	Panfillo (copper) [L.] [S.E.]	1 0 0	—	—	Stock.
6000	Peel River Lead and Mineral (Limited)	200 0 0	—	—	Jan. 1864
23000	Quebrada (copper), Venezuela [L.] [S.E.]	4 10 0	—	—	Jan. 1864
10000	San Roque (lead), Spain	5 0 0	—	—	Fully paid.
40000	Santa Barbara (gold), Brazil [L.]	0 12 6	—	—	Jan. 1864
120000	Scottish Australian Mining Company [L.]	0 17 6	—	—	Feb. 1864
18000	South Europe Mining Company, Spain [L.] [S.E.]	3 0 0	—	—	May, 1860
12000	Teplitz Colliery Co., Bohemia [L.] [S.E.]	3 0 0	—	—	June, 1863
50000	Valdemard Mining Company, Spain [L.] [S.E.]	8 0 0	—	—	Mar. 1864
40000	Valsaiza (gold), Italy [L.]	0 7 6	—	—	Dec. 1863
40000	Victor Emanuel (copper), Italy [L.]	1 0 0	—	—	Fully paid.
1000	Western Africa Malachite (copper) [L.]	110 0 0	—	—	Oct. 1862
12000	Whal Ellen (copper), South Australia [L.]	5 0 0	—	—	Fully paid.
10000	Worthing (copper), South Australia [L.] [S.E.]	1 0 0	—	¾	Fully paid.